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ANNUAL REPORT

Corporate Profile

Altair International owns a proprietary technology for making nanocrystalline materials of unique quality, economically in large quantities. The company is currently developing special nanomaterials with potential applications in batteries, fuel cells, hard coatings, catalysts, cosmetics, paints, semi-conductors, telecommunications and environmental remediation. The technology may also be used to make paint pigment at a cost forecast to be substantially lower than commercial technologies employed today.

Nanotechnology

According to MIT Technology Review, "nanotechnology (the science of the extremely small) is the most significant emerging materials technology for this century." This new technology, through its capability of altering component materials, significantly impacts the design and performance of most all industrial products including computers, telecommunications equipment, the production and storage of energy, biotechnology and pharmaceuticals. According to Mihail Roco, nanotech advisor to the White House, "because of nanotechnology, we'll see more changes in the next 30 years than we saw in all the last century."

Nanoparticle size is defined as 1-100 nanometers (billionths of a meter). At their smallest nanoparticles are near molecular sized. Particles this size exhibit unique physical and electrochemical properties; properties that are expected to enable manufacture of stronger, harder, more wear resistant materials and to make entirely new products. Nanomaterials are already used to make improved products for alternative energy, advanced ceramics, catalysts, cosmetics, paints and coatings and environmental remediation. Scientists are rapidly developing new applications in a diverse range of industrial sectors such as telecommunications, computers, pharmaceuticals and medical devices.

Letter to our shareholders:

On behalf of the Board of Directors, management and all Altair employees, I want to thank you, our shareholders, for your continued support and enthusiasm. This past year has seen the achievement of significant milestones leading to a fully developed nanotechnology company.

Advanced Battery Materials

Altair has developed a nano-sized lithium titanate spinel ($\text{Li}_4\text{Ti}_5\text{O}_{12}$) material for use in advanced battery applications. Independent authorities have confirmed that Altair's proprietary nanomaterials have made it possible to achieve lithium ion charging and discharging rates 10 to 100 times higher than with materials commercially available today. According to independent experts, capacities close to the theoretical values can be obtained from these materials at exceptionally high rates making the Altair materials suitable for the development of high power, rechargeable lithium ion batteries.

The lithium ion battery has many advantages over three water-based electrolyte batteries and, because of these advantages, lithium ion batteries are increasingly becoming the battery of choice for portable consumer products such as cellular telephones and notebook computers. A potential market for rechargeable lithium ion batteries made from nano-sized lithium titanate spinel is the replacement of the lead-acid and nickel-cadmium batteries currently used in automotive traction (golf carts, fork lifts, wheel chairs and bicycles), uninterruptible power supplies (UPS) in the telecommunications industry, and in various military applications. These applications are aided by the fact that these batteries have the ability to undergo charge/discharge cycles with little fade in capacity for thousands of cycles. Other potential markets are as power sources for hybrid electric vehicles.

Partnerships

During November, Altair announced a co-marketing and development agreement with the FMC Lithium Division, the world's largest producer of lithium. FMC is expected to lead the collaboration in the commercialization, marketing and sales of the nano-lithium titanate spinel through their global distribution network and customer partnerships. FMC will develop anode and cathode materials from Altair's nanomaterials to offer to its long list of battery manufacturers for research and commercial product development.

Altair has signed an agreement with the American-based subsidiary of one of Japan's leading exporters of international goods and services. The agreement sets the stage for the companies to form a relationship in connection with the introduction and sale of the company's lithium titanate spinel nanomaterials, as well as other nano-based products exclusively to battery and automobile manufacturers throughout Japan.

Fuel Cells

The Altair fuel cell development program is progressing ahead of schedule.

Fuel cells are energy conversion devices that produce electricity by electrochemical combinations of fuel with an oxidant. They are more efficient than conventional electric power generation, are much cleaner and quieter than alternative solutions and can be remotely located. Given these inherent technology advantages, significant effort is being exerted by both commercial and governmental entities to commercialize the technology.

Fuel cells were cited recently by President Bush as one of the "cutting edge technologies" that could help reduce emissions of greenhouse gases. During August 2001, the U.S. Department of Energy (DOE) announced a \$500 million effort to produce breakthrough fuel cells that will overcome current cost barriers.

According to the DOE, fuel cells are being installed commercially today, but high costs have largely limited their usefulness to customers that demand premium-quality, highly-reliable onsite power. Today, fuel cells are custom manufactured and assembled one at a time, a labor intensive and expensive operation. The

DOE believes that developing an all-solid-state fuel cell that can be mass manufactured is one of the best ways to dramatically lower costs much like advances in solid state technology have cut the costs of computers and other electronics.

Altair has developed a nano-sized yttria stabilized zirconia (YSZ) breakthrough material for use in making solid oxide fuel cell core structures. The Altair fuel cell program approach is to use its proprietary materials technology to solve problems related to expensive materials, costly fabrication, high temperatures and materials compatibility, and low wattage densities. Additionally, Altair is working with the Massachusetts Institute of Technology (MIT) to solve problems related to the usages of a variety of different fuels. The development is progressing ahead of expectations and Altair has planned completion of a working prototype fuel cell core structure during the first half of 2002.

Completion of a working prototype will enable Altair to select development partner(s).

Camden Titanium Mineral Project

The company cleared a major hurdle at Camden having successfully operated the pilot facilities and demonstrating that heavy minerals at the Camden site can be recovered on a commercial scale. In keeping with the corporate decision to focus solely on the nanotechnology sector, management is now seeking monetization of the property. Monetization could be accomplished through sale and/or royalty arrangement or a joint venture (junior partner status). Several companies have expressed interest and discussions are ongoing.

Revenues

Altair broke into the reportable revenue column during 2001, reporting \$43,000 for the year and I am pleased to report that revenue during the first quarter of 2002 has already exceeded this amount. The majority of the revenue recognized to date has encompassed sales of TiO₂ nanomaterials and lithium titanate nanomaterials being sold primarily into advanced battery and ceramic thermal spray markets, which are expected to continue to be the primary source for product sales in the near future. Thermal spray coatings are used for wear, heat and corrosion resistance in a wide variety of applications from drill bits and cutting tools to the inside of jet engines. Nano-sized powders enhance desired thermal spray coating attributes including wear resistance, improved ductility and toughness and provide a smooth surface where required (for example, jet engines). Altair has developed products for the most demanding applications.

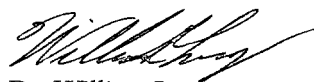
Emphasis on Nanotechnology Markets

The Altair management focus on nanotechnology markets has been elevated and emphasized by the appointment of Dr. Rudi Moerck to President of the company. Rudi has already made significant contributions to the success of Altair and his 23 years of business development and management experience coupled with his industry knowledge and extensive relationships will be tremendous assets to Altair.

In order to punctuate our commitment to nanotechnology your Board has recommended to shareholder vote that the Altair name be changed to Altair Nanotechnologies Inc.

Many milestones have been accomplished during 2001 and we look forward to many more accomplishments during 2002. We have enjoyed a continuing dialog with many of our shareholders and encourage that communication. Thank you for your support.

On behalf of the Board,



Dr. William Long,
Chairman and Chief Executive Officer

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

- ☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED **DECEMBER 31, 2001**
- ☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _____ to _____.

ALTAIR INTERNATIONAL INC.
(Exact name of registrant as specified in its charter)

**Province of
Ontario, Canada**
(State or other jurisdiction of incorporation)

1-12497
(Commission File No.)

None
(IRS Employer Identification No.)

1725 Sheridan Avenue, Suite 140 Cody, Wyoming 82414
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (307) 587-8245

- ☐ Securities registered pursuant to Section 12(b) of the Act: None
- ☒ Securities registered pursuant to Section 12(g) of the Act:

Common Shares, no par value
(Title of Class)

Nasdaq National Market
(Name of each exchange on which registered)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

The aggregate market value of the common shares held by non-affiliates of the Registrant on March 19, 2002, based upon the closing sale price of the common shares on the NASDAQ Stock Market of \$.92 per share on March 19, 2002, was approximately \$2,592,740. Common Shares held by each officer and director and by each other person who may be deemed to be an affiliate of the Registrant have been excluded. As of March 19, 2002, the Registrant had 22,813,120 common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE
None

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PART I

This Annual Report on Form 10-K for the year ended December 31, 2001 (this "Form 10-K") contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that involve risks and uncertainties. Purchasers of any of the common shares, no par value (the "common shares") of Altair International Inc. ("Altair" or the "Company") are cautioned that the Company's actual results will differ (and may differ significantly) from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those factors discussed herein under "Factors That May Affect Future Results" and elsewhere in this Form 10-K generally. The reader is also encouraged to review other filings made by the Company with the Securities and Exchange Commission (the "Commission") describing other factors that may affect future results of the Company.

Item 1. Business

Certain technical terms used in the following description of our business are defined in a glossary set forth on page 16. We have identified such terms by italicizing them the first time they are used in the text. Unless the context requires otherwise, all references to "Altair," "we," "Altair International Inc.," or the "Company" in this Form 10-K refer to Altair International Inc. and all of its subsidiaries. Altair is presently doing business under the name Altair Nanotechnologies Inc.

In relation to the Tennessee mineral property, Altair is an exploration stage company (as defined in Guide 7 promulgated under the Securities Act of 1933, as amended), and there is no assurance that a commercially viable mineral deposit exists on the Tennessee mineral property or any other property leased by Altair. We will cease to be an exploration stage company with respect to the Tennessee mineral property only when and if we have established the existence of a commercially minable deposit.

General

Altair International Inc. was incorporated under the laws of the Province of Ontario, Canada in April 1973 for the purpose of acquiring and exploring mineral properties. During the period from inception through 1994, we acquired and explored multiple mineral properties. In each case, sub-economic mineralization was encountered and the exploration was abandoned. Since 1994, we have also devoted substantial resources to the development and testing of mineral processing equipment for use in the recovery of fine, heavy mineral particles.

In November 1999, we acquired all patent applications, technology and tangible assets related to a hydrometallurgical process developed by BHP Minerals International, Inc. ("BHP") primarily for the production of titanium dioxide ("TiO₂") products from titanium bearing ores or concentrates (the "titanium processing technology"), and all tangible equipment and other assets used by BHP to develop and implement the titanium processing technology. Although the titanium processing technology is capable of producing a variety of titanium products, we plan to initially employ the titanium processing technology for the production and sale of TiO₂ nanoparticles. See "—Titanium Pigment Processing Technology."

We have also leased, and are exploring, approximately 9,700 acres of land near Camden, Tennessee (the "Tennessee mineral property") to determine whether it would be amenable to large-scale mining for titanium and zircon. See "—Tennessee Mineral Property."

During 1996, we acquired the rights to the Campbell Centrifugal Jig, since modified and renamed the Altair Centrifugal Jig (the "jig"). The jig is a machine that uses a rotating circular screen and pulsating water to separate valueless mineral particles from more valuable mineral particles based on the differences in their *specific gravity*. In tests, the jig has proven capable of segregating and recovering extremely fine

mineral particles. Because of limitations on operating capital, we did only limited jig testing work during 2001. See “—Jig Technology and Proprietary Rights.”

We have experienced an operating loss in every year of operation. In the fiscal year ended December 31, 2001, we experienced a net loss of \$7,754,031.

Altair currently has two wholly-owned subsidiaries, Fine Gold Recovery Systems, Inc., a Nevada corporation (“**Fine Gold**”), and Mineral Recovery Systems, Inc., a Nevada corporation (“**MRS**”). A third subsidiary, 660250 Ontario Ltd., was amalgamated with Altair in December 2001. It had been inactive for several years prior to the amalgamation. Altair also has two indirect wholly-owned subsidiaries, Altair Nanomaterials, Inc., a Nevada corporation, and Tennessee Valley Titanium, Inc., a Nevada corporation. Altair Nanomaterials, Inc., previously known as Altair Technologies, Inc., changed its name in September 2001 to better reflect the nature of its business.

Titanium Pigment Processing Technology

Description of the Titanium Processing Technology

On November 15, 1999, we purchased from BHP all patent applications, technology and tangible assets related to a hydrometallurgical process developed by BHP primarily for the production of titanium dioxide products from titanium bearing ores or concentrates (i.e., the titanium processing technology), and all tangible equipment and other assets used by BHP to develop and implement the titanium processing technology (the “**titanium processing assets**”). The titanium processing technology is capable of producing conventional TiO_2 pigment products. Conventional TiO_2 pigments are finely-sized powders consisting of TiO_2 crystals. These powders may be either *anatase* or *rutile* phase (shape) and approximate 0.17 to 0.30 *microns* in size. Our titanium processing technology is also capable of producing TiO_2 nanoparticles, a specialty product with a size range of 10 to 100 nanometers (approximately one tenth the size of conventional pigments). The primary products currently being produced in the processing plant are TiO_2 and lithium titanate nanoparticles.

The titanium processing technology is based on a proprietary dense-phase crystal growth technique which controls crystal formation using a combination of mechanical and fluid dynamics and chemical and thermal control. Through introduction of very small quantities of selected chemicals (“**doping elements**”) during crystal growth, the size, phase, catalytic and *photocatalytic* activity and size distribution of crystals can be controlled within narrow limits and to specification.

Titanium Processing Assets. The titanium processing assets consist principally of a production facility located in the leased premises. During 2000, we installed additional equipment to increase production capacity to a nominal annual amount of 200 tons of TiO_2 nanoparticles. We also added a separate pilot facility to produce large sample quantities of product for development, test and evaluation purposes. In 2001, we added hydration and filtering equipment to improve production processing.

Plans for Development of the Titanium Pigment Processing Technology. The titanium processing technology has potential to produce both titanium pigments, which are commercially traded in bulk, and TiO_2 nanoparticles, which are sold on specialty product markets. Our plan is to first concentrate on development of TiO_2 nanoparticle products, which may be produced and sold in commercial volumes utilizing the in-place, 200 ton per year plant in Reno. In the future, we plan to work to commercialize a titanium pigment production capability – an activity we hope to do in conjunction with an as yet unidentified industry partner.

We have transferred our titanium processing assets and titanium processing technology to Altair Nanomaterials, Inc. (“**Altair Nanomaterials**”), a wholly-owned subsidiary of Altair, hired a president of Altair Nanomaterials and hired fourteen former BHP employees who were instrumental in the development of our titanium processing technology. Certain of these employees are continuing research and development work while others are involved in marketing, product development, and operation and maintenance of

the production facility. During 2001, we generated \$42,816 of revenue through sales of TiO₂ and lithium titanate nanoparticles and other materials. These products were used principally in thermal spray and catalyst applications and for developmental work on battery materials.

Products In Development Using the Titanium Processing Technology. To date, we have developed TiO₂ nanoparticles and other products we intend to initially produce with the titanium processing technology. The designation, description, potential applications and status of development of our products that we have publicly announced are as follows:

| Product Designation | Description | Potential Applications | Status of Development & Sales |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TiNano™ 40 VHP | This is an uncoated, high purity titanium dioxide nanoparticle product with good thermal stability. | Environmental purification, photocells, catalyst and similar ceramic applications, self-cleaning & sanitizing uses and thermal spray coatings. Intermediate for manufacture of derivatives such as lithium titanate and barium titanate. | During 2001, we sold \$29,200 of this product to 11 customers for use primarily in the testing and development of thermal spray, catalyst and chemical mechanical planarization applications. We have received follow up orders from two customers. |
| TiNano™ 40 USP | This product meets US Pharmacopeia specifications, exhibiting high UV absorption characteristics, and high thermal stability. | Cosmetic and other uses requiring USP grade material. USP grade may also be used in many of the VHP applications and has greater temperature stability. | During 2001, we sold \$300 of this product to two customers. We are developing coating procedures to make TiNano™ 40 CNPC from this regulated material. |
| TiNano™ 40 HPC | This product exhibits high UV absorption, high photo catalytic activity and excellent thermal stability. | Environmental purification, photocells, catalysts, and similar ceramic applications. Also may be used for self-cleaning and sanitizing applications. | During 2001, we sold \$615 of this product to three customers. We intend to discontinue this product as there is no substantial market for it. |
| TiNano™ 40 RPC | This product exhibits high UV absorption. It exhibits reduced photo catalytic activity achieved using our inorganic coating rather than the traditional Si-Al treatment. Also exhibits excellent thermal stability. | Cosmetics, plastics and coatings applications requiring reduced photochemical activity. | During 2001, we sold \$50 of this product to one customer. We are developing a dispersion technology for application in plastics and organic formulations. |
| TiNano™ 40 CNPC | This product exhibits very high UV absorption. The product is USP grade TiO ₂ coated with hydrous alumina and silica. The coating substantially reduces photo catalytic activity. | Cosmetic and coating applications. | During 2001, we sold \$70 of this product to two customers. We are developing a coating and dispersion technology. |
| Lithium Titanate Spinel | This product is a robust crystalline structure of lithium titanate. It withstands high lithium insertion rates with very little distortion. | Lithium ion batteries where high charge and discharge rates are desired. | During 2001, we sold \$2,209 of lithium titanate to three customers for use in testing and development of battery materials. |

The products identified above, and other products we are developing with the titanium processing technology, are generally not commodities and must be customized for a specific application working in cooperation with the end user. Accordingly, unless and until we receive an order containing specifications with respect to commercial quantities of each nanoparticle product, that product is necessarily in the development phase. To date, we have not received specifications with respect to commercial quantities of any nanoparticle product, and no customer has used any of our nanoparticle products in a commercial product held for sale.

Target Market for Products of the Titanium Processing Technology. TiO_2 nanoparticles are marketed and sold as specialty chemicals. End users typically work closely with suppliers to set product specifications, which may or may not be subsequently certified for individual applications. Very little TiO_2 nanoparticle product is sold as a fungible "shelf-item" product.

Altair's plan for TiO_2 nanoparticle market entry has been to prepare a suite of products that have a range of physical and chemical properties. Potential TiO_2 nanoparticle end users are invited to test our basic products and to separately work with us so that we may tailor a nanoparticle product for their particular use. We have filled 557 requests for samples of nanoparticle products from the 174 companies and laboratories that have contacted us. Based on sales to date and sample requests, applications for and interest in our TiO_2 nanoparticles are seemingly most advanced in applications for batteries (*lithium titanate*), thermal sprays (TiO_2), solid oxide fuel cells (*yttrium stabilized zircon*) and catalysts (both TiO_2 and *yttrium stabilized zircon*). These are applications from which we hope to make our first volume commercial sales.

Research, Testing and Development of the Titanium Processing Technology. Our titanium processing technology is the result of several years of research and development work done by BHP. We are continuing the research and development work to both improve the process and to develop commercial applications for it. Such work is being conducted by the former BHP employees who became employees of the Company on January 1, 2001. During fiscal 2001, we incurred \$541,000 in research and development expenses related to the titanium processing technology. During fiscal 2000, we incurred \$1,426,000 in research and development expenses related to the titanium processing technology.

In addition, we are engaged in joint research and development efforts with potential customers and other interested parties. For example, in August 2000, we entered into an agreement with the Massachusetts Institute of Technology ("MIT") to carry on joint research to develop a nanostructured fuel cell system for direct hydrocarbon conversion. The research program uses wafer thin sheets of yttrium stabilized zirconia and other materials produced by Altair in conjunction with novel nanostructured *anode catalysts* developed by MIT.

The Titanium Processing Technology and Proprietary Rights. BHP filed numerous patent applications with the United States Patent and Trademark Office with respect to our titanium processing technology, and the applications have been transferred to us. We have subsequently filed five additional patent applications relating to nanoparticle technology. All the applications are in the review process, and no patents with respect to the titanium processing technology have been granted to date.

Competition—the Titanium Processing Technology. Our titanium processing technology is fundamentally different from current commercial processing techniques. Other processes are based on either a precipitation of particles from aqueous solution or the formation of crystallites from molten droplets of titanium oxide generated in high temperature flame reactors. Our process is a dense-phase crystal growth technique which controls crystal formation using a combination of mechanical and fluid dynamics and chemical and thermal control.

Our process permits exceptional control over particle size, shape, and crystalline form. Our titanium processing technology produces discrete anatase crystals in nanometer sizes and may be doped to be thermally stable up to 800 degrees Centigrade. By remaining stable in high-temperature processing, nanoparticles produced by our titanium processing technology retain the desired nanoparticle size and crystalline phase. In addition, our technology is designed to minimize process effluents needing environmental remediation and to accept a wide variety of naturally occurring titanium feed stocks.

We have not operated the titanium processing technology at a commercial scale. Accordingly we cannot describe processing efficiencies and costs associated with our titanium processing technology or compare such efficiencies and costs to those of competitors.

In addition, our ability to capitalize on and develop our technology may be limited by the limited amount of capital we have available and our lack of a substantial operating history. There are approximately ten significant producers of TiO₂ nanoparticles in the world, the largest of which supplies approximately 20% of the market. Competing nanoparticle producers are financially strong corporations who enjoy established customer relationships and operating histories.

Royalty Obligations Related to Our Titanium Processing Technology. We purchased our titanium processing technology and titanium processing assets from BHP pursuant to an on Asset Purchase and Sale Agreement dated November 15, 1999. The purchase price for the titanium processing technology and titanium processing assets was \$9,625,500. In addition, the Asset Purchase and Sale Agreement also requires us to pay to BHP, until the earlier of November 15, 2014 or the date we have paid an aggregate royalty of AUD\$105,000,000, a quarterly royalty equal to:

- 1.5% of the international market price of all uncoated TiO₂ pigment produced and sold as a result of the use of the titanium processing technology by Altair or a transferee at Altair's mineral properties in Tennessee;
- 1.5% of the international market price of all uncoated TiO₂ pigment produced and sold as a result of the use of the titanium processing technology by BHP or any affiliate of BHP at a specified heavy mineral sand operation located near Auckland, New Zealand;
- 3% of the international market price of all uncoated TiO₂ pigment produced and sold as a result of the use of the titanium processing technology by Altair or a transferee of Altair at any location other than its Tennessee mineral property or BHP's Auckland, New Zealand heavy mineral sand operation; and
- 3% of the sales proceeds (F.O.B. Altair's facility, reduced by the amount of product returns) received by Altair or a transferee of Altair from the sale of any products other than TiO₂ pigment produced through its use of the titanium processing technology.

Tennessee Mineral Property

Description of the Tennessee Mineral Property. The Tennessee mineral property consists of approximately 9,700 acres of land containing fine, heavy minerals that we have leased in or near Camden, Tennessee. We had previously leased approximately 14,000 acres. However, during 2001, we terminated the leases on approximately 4,300 acres that were distal to our core leasehold in an effort to reduce cash expenditures and concentrate our resources on our core holdings.

Prior to our beginning to acquire leases on the Tennessee mineral property in 1996, sections of the Tennessee mineral property were leased or owned by each of E.I du Pont de Nemours and Company (from 1950 to 1954), KerrMcGee Corporation (from 1975 to 1989), and BHP Minerals International Inc. (from 1991 to 1994). Each of these predecessors engaged in drilling, sampling and other exploratory activities on the Tennessee mineral property but, based upon such predecessors' particular circumstances and the economics of the period, elected to stop work and relinquish property rights.

The topography of the Tennessee mineral property consists of vegetation-covered rolling hills comprised of sands deposited in an ancient beach environment. Minerals on the Tennessee mineral property occur in the Cretaceous McNairy formation, and heavy minerals comprising 2% to 8% of the sand (by weight) are typical. The mineralized sands on the Tennessee mineral property have not yet been proven to be a reserve

(as defined in Regulation S-K, Item 802, Guide 7 promulgated under the Exchange Act), and our limited operations and proposed plan with respect to it are exploratory in nature.

Research and Exploration on the Tennessee Mineral Property. From 1996, our exploration activities on the Tennessee mineral property have included geologic mapping, collection of bulk samples for metallurgical testing, drilling of 156 auger holes between 30 and 100 feet deep and preparation of geologic models. Our geologic model also incorporates 40 drill holes completed by an earlier exploration company.

During 1997, we collected approximately 5,000 pounds of representative sand for testing from an exposed sand horizon. This sample was processed by an independent Florida heavy sands producer and Altair to produce representative samples of market-quality products. The sample results were reviewed by an independent consulting group hired by us to prepare a pre-feasibility study of approximately 4,700 acres of the Tennessee mineral property known as the "Camden Property." The consultants examined heavy mineral suites from the Camden Property (prepared from sands naturally containing about 4% heavy minerals and 96% quartz) and found that titanium bearing minerals constitute about 65% of the total heavy mineral portion of the suite, zircon accounted for 15% of the heavy mineral portion of each suits and the remainder was non-valuable heavy minerals. The study, completed in July 1998, also indicated that market-quality ilmenite, rutile and zircon products could be produced from such heavy minerals suites and that markets currently exist for such products:

In August 1998, based on the consultant's pre-feasibility report, we commenced additional feasibility testing. This consisted of testing the use of fine mineral spiral equipment in Florida on Tennessee mineral property sands followed by spiral equipment testing of Tennessee mineral property sands at an equipment contractor's facility. In 2000, based on the contractor's test results, we designed and commissioned construction of a spiral-based pilot plant for testing at the Tennessee mineral property. The plant was erected at Camden and testing operations began in early 2001 (see "Location and Status of Work on the Tennessee Mineral Property"). Further feasibility testing is expected to involve, among other things, the following:

- drilling and sampling in order to more accurately determine the quantity, quality and continuity of minerals on the Tennessee mineral property;
- examining production costs and the market for products produced at the pilot facility;
- designing and pricing construction costs associated with any proposed mining facility;
- identifying and applying for the permits necessary for any proposed full-scale mining facility; and
- attempting to secure financing for any proposed full-scale mining facility.

Subsequent to completion of the 1998 pre-feasibility study, our further exploration of the Tennessee mineral property has suggested the existence of additional heavy mineral sands in an area northwest of the Camden Property known as "Little Benton." Preliminary data indicate that Little Benton contains mineralization similar to the Camden Property. We have approximately 3,500 acres under lease in the Little Benton area and intend to conduct further testing in the future.

Exploration expenditures on the Tennessee mineral property were \$930,777 in 2001, \$1,217,966 in 2000 and \$4,169,795 to date. Expenditures have been incurred for pilot plant design, fabrication and site preparation, leasehold minimum advance royalty payments, and other related exploration activities. We anticipate spending between \$700,000 and \$1,200,000 exploring the Tennessee mineral property during 2002. The amount of future expenditures will depend upon the availability of financial capital and the results of our ongoing feasibility testing.

Competition—the Tennessee Mineral Property. Based on the exploratory work done to date, we anticipate that the saleable products which could be produced from the Tennessee mineral property are ilmenite, rutile and zircon. Testing at the Tennessee mineral property indicates that Camden ilmenites contain from 64% to

72% titanium dioxide. Ilmenites commercially traded today typically contain 40% to 70% titanium dioxide and are used primarily in the production of titanium dioxide pigment, a specialty chemical used principally as a whitener and opacifier for paper, plastics and paint. According to the latest U.S. Geological Survey report, ilmenite is the most abundant naturally occurring, commercially produced titanium mineral and supplies approximately 90% of the world demand for titaniferous material. Such demand is projected to increase at an annual rate of 2%-3% for the foreseeable future. The value of titanium mineral concentrates consumed in the United States in 2001 was approximately \$470 million. There are presently two entities in the United States which produce ilmenite concentrate from heavy mineral sands and virtually all production is used by four titanium pigment producers whose plants are primarily located in the southeastern U.S. Pigment producers use various methods to process ilmenite concentrate into titanium dioxide pigment and require that the concentrate feedstock meet certain chemical and size criteria applicable to the process being used.

Rutile, which generally contains greater than 95% titanium dioxide, is also used in the production of titanium dioxide pigment. In pigment products, its processing costs are significantly less than ilmenite due to the higher concentration of titanium dioxide. Although this greatly enhances its market value, rutile is much less abundant than ilmenite, representing approximately 5% of the total heavy minerals contained in the Tennessee mineral property.

Zircon, which is used in ceramic, refractory and foundry applications, represents approximately 15% of the heavy minerals contained in the Tennessee mineral property. Zircon sand is currently being produced at three mines in the southeastern U.S. and in several countries around the world. Titanium-bearing minerals and zircon are commonly found and mined together.

Location and Status of Work on the Tennessee Mineral Property.

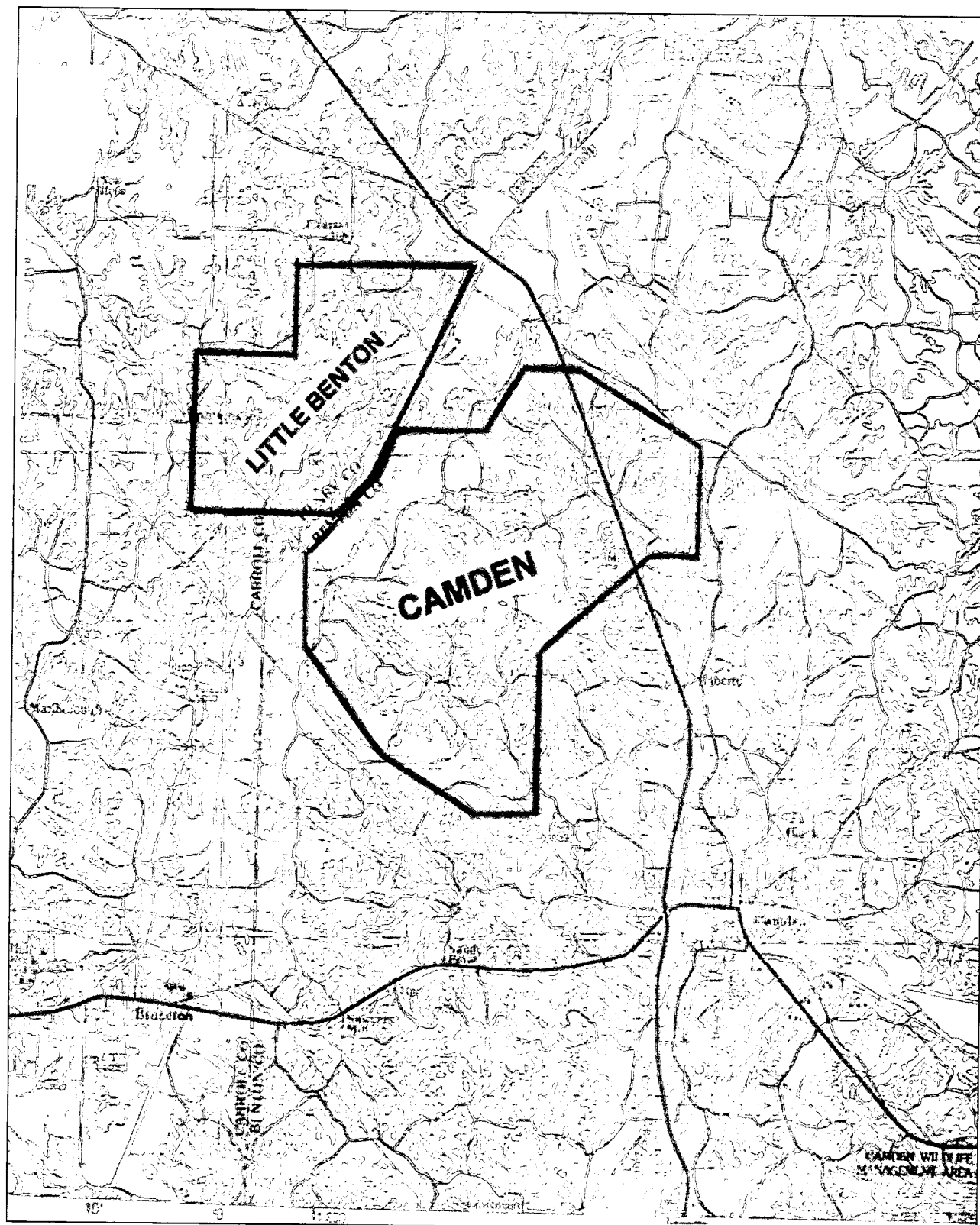
On the following page is a location map for the Camden and Little Benton region, within which are the leased parcels we collectively refer to as the Tennessee mineral property. Access within blocks is via a network of County and farm roads. Lease blocks in the Camden area are made up of contiguous rural tracts. Land uses are dominantly forestry and cattle grazing. Bottom lands are sometimes used for row crops. There is no history of mining in these areas.

Altair has an operating pilot plant on the Camden lease block. Pilot plant operations are fully permitted with the state of Tennessee and federal agencies. The plant includes dedicated electrical service, a lay-down area for heavy mineral sand samples, and a combined water storage/sand placement structure. Plant elements include a feed system, conveyors, trommel, two stages of cyclones, and a five-stage spiral plant.

During 2001, we excavated 970 tons of material from four sites in the Camden leasehold area and processed it through the test facility. Plant operations closely approximated design expectations and we incurred no significant operating problems. Processing of the sample material yielded titanium recoveries exceeding 80% and zirconium recoveries exceeding 90%. These percentages represent the amounts of titanium and zirconium recovered as a percentage of the total titanium and zirconium contained in the sample. Heavy mineral concentrates were subsequently processed through an off-site dry mill to prepare sample products which are now being analyzed by interested parties.

During 2002, we plan to produce additional bulk concentrates for dry mill processing and marketing purposes. Further development options for the Tennessee Mineral Property are being considered which include joining with a qualified partner to provide additional financial, engineering and corporate resources.

Tennessee Mineral Property



The Jig

Description of the Jig. The Altair Centrifugal Jig segregates particles based on differences in their specific gravity. Such technology may be categorized as a "gravity separation" process. Gravity separators are widely used in minerals *beneficiation* because of their relative simplicity, low cost of operation and ability to continuously treat large tonnage throughput. Preliminary demonstration tests conducted by Altair and a previous owner of the jig suggest that the jig may be commercially useful in a number of applications, including:

- Recovery of ultra fine gold from waste streams or former *tailings*;
- Recovery of zircon, rutile, ilmenite, leucoxene, and other valuable fractions from heavy mineral sand operations;
- Sulfur and *ash* removal from fine coal;
- Recovery of tin and iron ore fines from fine tailings;
- Concentration of heavy minerals, such as anatase, apatite, barite, cassiterite, chromite, columbite, industrial diamonds, fluorite, various garnets, monazite, tantalite and wolframite; and
- Remediation of nuclear waste.

Several prototype and demonstration jigs have been built and tested by Altair and previous owners of the jig. Our Series 12 Jig stands about six feet tall, requires floor space of about 25 square feet and weighs approximately 2,000 pounds. Our Series 30 Jig stands about 10 feet tall, requires floor space of about 54 square feet and weighs approximately 7,000 pounds. Recently constructed jigs have been mounted on metal frames along with jig auxiliary equipment—pulse water pump and tank and control panel—for transport by truck and rapid on-site installation.

How the Jig Works. A conventional jig separates a slurry of mineral particles as it flows across the top of a screen. Water is periodically pulsed up through the screen to eliminate interparticle friction and allow differential settling according to the variations in the net specific gravities of the ore. Heavier minerals are allowed to pass downward through the screen while lighter materials flow across the screen to a discharge point. The jig operates according to conventional jig principles except that the screen surface is cylindrical and is rotated to subject the particles to *centrifugal* forces. As currently designed, materials to be processed by the jig are introduced into the top of the jig in a slurry mix with water. The slurry is diffused across the top of the interior of a vertical cylindrical screen which is rotating. Water is pulsed through the screen allowing differential separation in the slurry material. Heavy particles pass through the screen, are collected, and exit the machine in a "concentrate" stream. Lighter particles flow down the screen interior, are collected and exit out the bottom of the machine in a separate "tails" stream. Use of the jig requires no chemical additives.

In operation, the jig utilizes a combination of standard mechanical jig and *centrifugal* technologies. The jig is of simple mechanical design with few wear surfaces. To compete as a viable commercial unit, the jig must perform reliably over long time periods. The 600+ hours that we have tested and operated the Series 30 Jig is insufficient to give assurance as to the length of the operating life of the jig.

Target Markets for the Jig. In the long run, the jig may potentially be useful for a number of applications. We believe that the most promising market for the jig in the short run is for use in processing of heavy mineral sands in order to recover heavy minerals, particularly zircon and titanium.

The primary valuable minerals produced from heavy mineral sands are titanium and zircon. Titanium is used primarily as a basic component of titanium dioxide, a pigment used principally as a whitener and opacifier for paper, plastics, and paint. Zircon is used primarily for foundry molds and in the manufacture of certain types of glass and ceramics. The domestic and international markets for both of these products are well established. Both are commodities traded in bulk, usually under long-term contracts, and are also sold in

50-100 lbs. bags, usually traded as a spot-priced product. The U.S. Geological Survey has reported that the value of titanium mineral concentrates consumed in the United States in 2001 was approximately \$470 million. The U.S. Geological Survey estimates zirconium production for the United States at approximately 100,000 metric tons in 2001, representing a market value of approximately \$35 million. There can be no assurance that testing will demonstrate that the jig can economically extract heavy minerals from heavy minerals sands or that the jig will prove attractive to end users.

Research, Testing and Development of the Jig. Verification testing with the Series 12 Jig suggests the jig's potential for recovering zircon from heavy mineral sand dry mill tails in Florida. In Phase 1 and 2 trials conducted by Altair involving separation of commercial grade zircon products from mineral sands, the Series 12 Jig withdrew a larger portion of zircon from the feed ore than other mineral sands processing equipment in use today. In tests on zircon/alumina silicate feeds conducted by Altair, the Series 12 Jig has yielded greater than 90% zircon concentrates and recovered up to 75% of the zircon fed to the unit. We have also conducted tests of the Series 12 jig at our Reno test facility. Fine titanium-bearing heavy mineral sands were processed through the jig with resulting titanium recovery rates of 86% and heavy mineral grades of 80%. These results mean that the concentrate produced by the jig, after processing, contained 80% heavy minerals and the jig recovered 86% of the titanium processed.

We have conducted preliminary testing of our Series 30 Jig at a mineral recovery plant operated by a large heavy mineral sand producer located in northern Florida. Results of the testing indicate that the Series 30 Jig is capable of producing separation results comparable in efficiency to those of the Series 12 Jig for zircon concentrates. The Series 30 Jig, however, is designed to be capable of processing 500 tons of solids per day, or more than four times the throughput capacity of the Series 12 Jig. The volumes of solids per day that the Series 30 and Series 12 Jigs are actually capable of processing on a sustained commercial basis have not been established. We have also begun design work for a larger jig that would have over twice the processing capacity of the Series 30 Jig. Such increased capacity would enhance the jig's commercial potential for high volume applications such as *coal washing* and recovery of *iron ore fines*.

The jig has multiple operating parameters, primarily rotational speed, pulsing pressure, and screen characteristics, which must be adjusted to fit the processing requirements of the particular feed stream being treated. More extensive testing is needed to identify the most efficient operating parameters for specifically identified applications. Furthermore, demonstration of sustained operation is critical to marketing efforts.

Although we have limited the amount of our jig testing work as a result of limitations on operating capital, our work during 2001 yielded design changes that enhance the jig's operating characteristics. We are assessing our options for furthering development of the jig and may consider selling the jig technology or licensing it to others. We are currently negotiating an agreement to perform jig tests for fine particle recovery at a third party's processing facility. Any such testing work will be funded by the third party.

Jig Technology and Proprietary Rights. Initial patents related to the concept of the jig as a whole were issued in the United States, South Africa, United Kingdom, Australia and Canada. These patents expired on various dates between May 1999 and December 2000. A series of second patents with respect to the process by which water is pulsed through the cylindrical screen on the jig, a critical component differentiating the jig from competing products, have been issued in the United States, South Africa, Japan, Europe, Australia, Canada, United Kingdom, Germany and France. These patents expire on various dates between January 2010 and January 2011. A third series of patents with respect to an efficiency enhancing component of the jig have been issued in the United States, Europe, Australia, Japan, South Africa, Canada and Brazil. These patents have expiration dates between April and November 2018.

Competition for the Jig. Various mineral processing technologies perform many functions similar or identical to those for which the jig is designed. Minerals processing technologies are generally predicated on the physical and chemical characteristics of the materials being processed. A minerals processor may

exploit contrasts in size, specific gravity, hardness, magnetic susceptibility, electrical conductivity, and similar characteristics to selectively extract and concentrate mineral constituents. Minerals processors also exploit variations in chemical reactivity and molecular affinity to selectively separate minerals.

The jig competes in an arena in which particle specific gravity is the primary criteria for particle segregation and capture. Competing technologies and products include the following:

Spirals and Cones. To separate out valuable particles with a spiral or cone, a mineral processor runs a sand-size feed slurried in water through a tilted trough (spiral) or over a convex surface (cone). In this process, fine-sized particles tend to "float" and not settle as quickly as larger particles. The difference in settling speed permits the mineral processor to separate out and extract the more valuable heavy particles. Spirals and cones are most effective in feed sizes larger than 150 mesh.

Froth Flotation Devices. To separate minerals using a froth floatation device, a processor introduces chemical agents into a pool of mixed particles, which agents attach to certain sulfides. Once attached to the chemical agents, the sulfides float to the surface. The froth flotation method can be effective on particles 200 mesh or smaller in size.

Heavy Media Separation. Heavy media separation is a process in which a feed containing both dense and light particles is fed into a solution whose specific gravity is midway between the particles to be separated. The light particles float to the surface of the solution, while the heavy particles sink. Heavy media separation is effective primarily in the removal of ash from coal and in small-scale analytic laboratory applications.

Jig-Like Products. The jig currently faces several forms of competition in the commercial segregation of dense particles contained in feeds between 150 and 400 mesh, including the Kelsey jig, Falcon concentrators and the Knelsen batch concentrator unit, which are currently being used worldwide.

- The Kelsey jig was developed in Australia and, although more complicated than the jig, incorporates similar centrifugal and jig technologies. According to the Kelsey jig's manufacturer, Geo Logics Pty. Ltd., Kelsey jigs are in service at 25 plants worldwide.
- The Falcon concentrator was developed in Canada and is used mainly for pre-concentration and scavenging. A centrifugal device, its applications to date have been in the gold and tantalum industries.
- The Knelsen Bowl was developed in Canada and is a batch concentrator rather than a jig. (A batch concentrator differs from the jig in that it process a finite "batch" of material, is completely emptied, and then processes a completely new finite batch, while the jig processes a continuous flow of materials). Our understanding is that the Knelsen Bowl is best suited to small volumes. Knelsen Bowls have been installed in various mining applications, primarily gold, throughout the world.

Long term testing needs to be completed to accurately define operating costs and operating efficiencies associated with the jig as compared to competing products. Results from further tests or actual operations may reveal that these alternative technologies and products are better adapted to any or all of the uses for which the jig is intended. Moreover, regardless of test results, consumers may view any or all of such alternative technologies as technically superior to, or more cost effective than, the jig.

Altair is a small player in an industry comprised of major mining companies possessing tremendous capital resources and we are an insignificant competitive factor in the industry. There is no assurance that competitors, many of whom may have significant capital and resources, will not develop or are not now in the process of developing competitive equipment that may be functionally or economically superior to our equipment.

Future Development of the Jig. We have concluded that, in the foreseeable future, our limited human and financial resources can most effectively be utilized in the development of the titanium processing assets and titanium processing technology and the Tennessee mineral property. Consequently, we are assessing our options

for furthering the development of the jig and may consider selling the jig technology or licensing it to others who have adequate resources to complete development of the jig, establish marketing and distribution channels and initiate manufacturing. In the meantime, we intend to do only limited test and design work on the jig.

Subsidiaries.

Altair International Inc. was incorporated under the laws of the province of Ontario, Canada in April 1973 under the name Diversified Mines Limited, which was subsequently changed to Tex-U.S. Oil & Gas Inc. in February 1981, then to Orex Resources Ltd. in November 1986, then to Carlin Gold Company Inc. in July 1988, then to Altair International Gold Inc. in March 1994, and then to Altair International Inc. in November 1996. Altair is currently doing business under the name "Altair Nanotechnologies Inc." and is considering proposing an amendment to its incorporation documents in order to change its legal name to "Altair Nanotechnologies Inc." during 2002.

Fine Gold was acquired by Altair in April 1994. Fine Gold has earned no operating revenues to date. Fine Gold acquired the intellectual property associated with the jig in 1996. Altair intends that Fine Gold will hold and maintain jig technology rights, including patents.

MRS was incorporated by Altair in April, 1987 and was formerly known as Carlin Gold Company. MRS previously has been involved in the exploration for minerals on unpatented mining claims in Nevada, Oregon and California. All mining claims have now been abandoned. MRS currently holds, directly or indirectly, all of Altair's interest in the Tennessee mineral property, and Altair intends that MRS will continue to lease or acquire and explore mineral properties in the future, particularly properties that contain minerals that may be processed with the jig.

Altair Nanomaterials, Inc. was incorporated in 1998 as a wholly-owned subsidiary of MRS and holds all of the Company's interest in our titanium pigment processing technology and related assets. The remaining 100% owned subsidiary, Tennessee Valley Titanium, does not presently have any assets or operations.

Government Regulation and Environmental Concerns.

Government Regulation. Our exploration of the Tennessee mineral property, testing of the jig, and operation of the titanium pigment processing facility are, and any future testing, operation, construction or mining activities of Altair will be, subject to a number of federal, state, and local laws and regulations concerning mine and machine safety and environmental protection. Such laws include, without limitation, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response Compensation Liability Act. Such laws require that we take steps to, among other things, maintain air and water quality standards, protect threatened, endangered and other species of wildlife and vegetation, preserve certain cultural resources, and reclaim exploration, mining and processing sites.

Compliance with federal, state, or local laws or regulations represents a small part of our present budget; nevertheless, continued compliance may be extremely costly, especially if we actually commence extraction operations on the Tennessee mineral property. If we fail to comply with any such laws or regulations, a government entity may levy a fine on us or require us to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect our development.

We are committed to complying with and, to our knowledge, are in compliance with, all governmental regulations. We cannot, however, predict the extent to which future legislation and regulation could cause us to incur additional operating expenses, capital expenditures, and/or restrictions and delays in the development of our products and properties.

Environmental Regulation and Liability. Any proposed mining or processing operation on the Tennessee mineral property, at the titanium pigment processing facility or any other property acquired by us will be subject to federal, state, and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation, and/or removal of substances discovered on the Tennessee mineral property or any other property used by us, which are deemed by the federal and/or state government to be toxic or hazardous ("**Hazardous Substances**"). Courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal, or transportation of Hazardous Substances. We might use Hazardous Substances and, although we intend to employ all reasonably practicable safeguards to prevent any liability under applicable laws relating to Hazardous Substances, companies engaged in mineral exploration and processing are inherently subject to substantial risk that environmental remediation will be required.

Employees.

The business of Altair is currently managed by Dr. William P. Long, President and Chief Executive Officer of the Company and Mr. C. Patrick Costin, Vice President of the Company and President of MRS and Fine Gold. In addition, we employ a Chief Financial Officer, a Vice President, a President of Altair Nanomaterials, Inc. and 23 additional employees. Aside from Dr. Long, Mr. Costin, the Chief Financial Officer, and the President of Altair Nanomaterials, Inc., we have no employment agreements with any of our personnel.

During 2001, we hired two plant operators and, in January 2002, we hired a Vice President for marketing. During 2002, we expect to hire sales, marketing and production employees for the titanium pigment processing business. The quantity and timing of new hires will be dependent on business activity. We do not otherwise anticipate that the number of Company employees will significantly increase until we have sufficient sales and business activity to warrant it.

Where You Can Find More Information.

We file annual, quarterly, and current reports, proxy statements, and other information with the SEC. You may read and copy any reports, statements, or other information that we file at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. The SEC also maintains an Internet site (<http://www.sec.gov>) that makes available to the public reports, proxy statements, and other information regarding issuers, such as Altair, that file electronically with the SEC.

Our common shares are quoted on the Nasdaq National Market. Reports, proxy statements and other information concerning Altair can be inspected and copied at the Public Reference Room of the National Association of Securities Dealers, 1735 K Street, N.W., Washington, D.C. 20006.

Enforceability of Civil Liabilities Against Foreign Persons.

We are an Ontario corporation, and a majority of our directors are residents of Canada. In addition, certain of our experts (including Canadian legal counsel) are located in Canada. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the United States securities laws. It is uncertain whether Canadian courts would (i) enforce judgments of United States courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of United States securities laws or (ii) impose liability in original actions against Altair or its directors, officers or experts predicated upon United States securities laws.

Glossary of Terms.

Amenability means responsiveness of an ore deposit to processing.

Anatase means one of three naturally occurring mineral phases of TiO_2 (along with rutile and brookite). Anatase particles have a tetragonal crystal structure.

Anode catalyst means the substance that activates the oxidizing reaction at the negative electrode (fuel side) of a solid oxide fuel cell.

Ash means inorganic residue remaining after coal combustion. Ash is an undesirable component of coal because it reduces thermal value and produces a waste product after combustion.

Beneficiate means to improve the grade of ore by processing.

Cathode catalyst means the substance that activates the reducing reaction at the positive electrode (air side) of a solid oxide fuel cell.

Centrifugal force means the component of force on a body in curvilinear motion that is directed away from the axis of rotation.

Coal washing means processing of pulverized coal to remove ash and pyrite. Pyrite is a yellowish-brown mineral sulfide containing iron and sulphur. Pyrite is an undesirable component of coal because sulphur dioxide gas is released when it is burned with coal.

Environmental remediation means removal of harmful mineral particles from a site previously altered by human activities.

Heavy minerals sands means beach or dune sands which contain a small fraction of heavy particles. Heavy mineral sands are commercially mined to produce titanium minerals and zircon.

Ilmenite means a titanium-bearing oxide mineral containing variable percentages of iron and used as a raw material in the production of titanium pigments.

Iron ore fines means particles of iron ore, usually less than 1 millimeter in diameter.

Lithium titanate is a compound of lithium, titanium and oxygen.

Mesh means one of the openings or spaces in a screen. The value (size) of the mesh is given as the number of openings per linear inch.

Micron means one millionth of a meter. One micron equals 1000 nanometers.

Mill means a building with machinery for processing ore. Dry mill refers to heavy minerals sand processing of dry materials. Wet mill refers to heavy minerals sand process of material that are mixed with water in slurry.

Placer means deposits of sand, gravel and other detrital or residual material containing a valuable mineral which has accumulated through weathering and natural mechanical concentration processes. A placer mine is an operation that recovers certain valuable minerals based on differences in specific gravity.

Photocatalytic means a process by which light frequencies activate the catalytic nature of a substrate.

Rutile means one of three naturally occurring mineral phases of TiO_2 (along with anatase and brookite). Rutile particles have a tetragonal crystal structure.

Specific gravity means the ratio of the mass of a solid or liquid to the mass of an equal volume of water at a specified temperature.

Suite means an assemblage of minerals which naturally occur together (i.e. a mineral suite).

Tails or tailings means those portions of washed ore that are regarded as too poor to be treated further, as distinguished from material (concentrates) that is to be smelted or otherwise utilized.

Tantalum is rare metal that is ductile (i.e. not brittle) easily fabricated, highly resistant to corrosion by acids, and a good conductor of heat and electricity and has a high melting point. The major use for tantalum, as tantalum metal powder, is in the production of electronic components, mainly tantalum capacitors. Major end uses for tantalum capacitors include portable telephones, pagers, personal computers, and automotive electronics.

Yttrium is an element on the periodic table.

Forward-looking Statements.

This Form 10-K contains various forward-looking statements. Such statements can be identified by the use of the forward-looking words "anticipate," "estimate," "project," "likely," "believe," "intend," "expect," or similar words. These statements discuss future expectations, contain projections regarding future developments, operations, or financial conditions, or state other forward-looking information. When considering such forward-looking statements, you should keep in mind the risk factors noted in the following section and other cautionary statements throughout this Form 10-K and our other filings with the Commission. You should also keep in mind that all forward-looking statements are based on management's existing beliefs about present and future events outside of management's control and on assumptions that may prove to be incorrect. If one or more risks identified in this Form 10-K or any other applicable filings materializes, or any other underlying assumptions prove incorrect, our actual results may vary materially from those anticipated, estimated, projected, or intended.

Among the key factors that may have a direct bearing on our operating results are risks and uncertainties described under "Factors That May Affect Future Results," including those attributable to the absence of significant operating revenues, the absence of profits, uncertainties regarding the development and commercialization of the jig, uncertainties regarding the quality, quantity and grade of minerals on the Tennessee mineral property, risks related to our proposed development and exploitation of our titanium processing technology and titanium processing assets and uncertainties regarding our ability to obtain capital sufficient to continue our operations and pursue our proposed business strategy.

Factors that May Affect Future Results.

We have not generated any substantial operating revenues and may not ever generate substantial revenues.

To date, we have not generated substantial revenues from operations. We have not generated revenues from the jig and are scaling back development efforts in the near future. We have generated only \$42,816 of sales revenues in our nanoparticle business and have not completed exploration of the Tennessee mineral property. We can provide no assurance that we will ever generate revenues from the jig or the Tennessee mineral property or that we will generate substantial revenues from the titanium processing technology.

We may continue to experience significant losses from operations.

We have experienced a loss from operations in every fiscal year since our inception. Our losses from operations in 2000 were \$6,647,367 and our losses from operations in 2001 were \$6,021,532. We will continue to experience a net operating loss until, and if, the titanium processing technology, the jig and/or the Tennessee mineral property begin generating significant revenues. Even if any or all such products or projects begin generating significant revenues, the revenues may not exceed our costs of production and operating expenses. We may not ever realize a profit from operations.

We may not be able to raise sufficient capital to meet future obligations.

As of December 31, 2001, we had \$599,884 in cash, and a working capital deficit of \$81,154. Although we have raised additional capital since December 31, 2001, we do not expect that this capital, when combined with projected revenues from nanoparticle sales, will be sufficient to fund our ongoing operations. Accordingly, we will need to raise significant amounts of additional capital in the future in order to sustain our ongoing operations and continue the testing and additional development work necessary to place the titanium processing technology into continuous operation. In addition, we will need additional capital for testing and development of the jig or exploration of the Tennessee mineral property. If we determine to construct and operate a mine on the Tennessee mineral property, we will need to obtain a significant amount of additional capital to complete construction of the mine and commence operations.

We may not be able obtain the amount of additional capital needed or may be forced to pay an extremely high price for capital. Factors affecting the availability and price of capital may include the following:

- market factors affecting the availability and cost of capital generally;
- our financial results;
- the amount of our capital needs;
- the market's perception of mining, technology and/or minerals stocks;
- the economics of projects being pursued;
- industry perception of our ability to recover minerals with the jig or titanium processing technology or from the Tennessee mineral property; and
- the price, volatility and trading volume of our common shares.

If we are unable to obtain sufficient capital or are forced to pay a high price for capital, we may be unable to meet future obligations or adequately exploit existing or future opportunities, and may be forced to discontinue operations.

Our competitors may be able to raise money and exploit opportunities more rapidly, easily and thoroughly than we can.

We have limited financial and other resources and, because of our early stage of development, have limited access to capital. We compete or may compete against entities that are much larger than we are, have more extensive resources than we do and have an established reputation and operating history. Because of their size, resources, reputation, history and other factors, certain of our competitors may have better access to capital and other significant resources than we do and, as a result, may be able to exploit acquisition and development opportunities more rapidly, easily or thoroughly than we can.

The sale of common shares issued upon the exercise of exchange rights or warrants may place downward pressure on the market price of our common shares and encourage short selling.

The sale in the open market of common shares issuable upon the exercise of exchange rights under existing and recently terminated notes and warrants may place downward pressure on the market price of our common shares. Speculative traders may anticipate the exercise of exchange rights or warrants and, in anticipation of a decline in the market price of our common shares, engage in short sales of our common shares. Such short sales could further negatively affect the market price of our common shares.

We have pledged substantial assets to secure the Secured Term Note.

We have pledged all of the intellectual property, fixed assets and common stock of Altair Nanomaterials, Inc., our second-tier wholly-owned subsidiary, to secure repayment of a Secured Term Note with a face value of \$2,000,000 issued on December 28, 2001. Altair Nanomaterials, Inc. owns and operates the titanium processing technology we acquired from BHP in 1999. The Secured Term Note is also secured by a pledge of the common stock and leasehold assets of Mineral Recovery Systems, Inc., which owns and operates our leasehold interests in the Camden, Tennessee area. If we default on the Secured Term Note, severe remedies will be available to the holder of the Secured Term Note, including immediate seizure and disposition of all pledged assets.

Operations using the titanium processing technology, the jig or the Tennessee mineral property may lead to substantial environmental liability.

Virtually any proposed use of the titanium processing technology, the jig or the Tennessee mineral property would be subject to federal, state and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation and/or removal of any hazardous substances discovered at any property we use. In addition, courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal or transportation of hazardous substances. We might use hazardous substances and, if we do, we will be subject to substantial risks that environmental remediation will be required.

Certain of our experts and directors reside in Canada and may be able to avoid civil liability.

We are an Ontario corporation, and a majority of our directors and our Canadian legal counsel are residents of Canada. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the United States securities laws. It is uncertain whether Canadian courts would (i) enforce judgments of United States courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of United States securities laws or (ii) impose liability in original actions against Altair or its directors, officers or experts predicated upon United States securities laws.

We are dependent on key personnel.

Our continued success will depend to a significant extent on the services of Dr. William P. Long, our President and Chief Executive Officer, and Mr. C. Patrick Costin, our Vice President and President of Fine Gold and MRS. The loss or unavailability of Dr. Long or Mr. Costin could have a material adverse effect on us. We do not carry key man insurance on the lives of Dr. Long or Mr. Costin.

We may issue substantial amounts of additional shares without stockholder approval.

Our Articles of Incorporation authorize the issuance of an unlimited number of common shares. All such shares may be issued without any action or approval by our stockholders. In addition, we have two stock option plans which have potential for diluting the ownership interests of our stockholders. The issuance of any additional common shares would further dilute the percentage ownership of Altair held by existing stockholders.

The market price of our common shares is extremely volatile.

Our common shares have been listed on the Nasdaq National Market since January 26, 1998. Trading in our common shares has been characterized by a high degree of volatility. Trading in our common shares may continue to be characterized by extreme volatility for numerous reasons, including the following:

- Uncertainty regarding the viability of the titanium processing technology, the jig or the Tennessee mineral property;
- Continued dominance of trading in our common shares by a small number of firms;
- Positive or negative announcements by us or our competitors;
- Industry trends, general economic conditions in the United States or elsewhere, or the general markets for equity securities, minerals, or commodities; and
- Speculation by short sellers of our common shares or other persons (such as the holders of the Exchangeable Term Note) who stand to profit from a rapid increase or decrease in the price of our common shares.

We may be delisted from the Nasdaq National Market if the price of our common shares does not remain above \$1.00 per share or if our shareholders' equity does not exceed \$10,000,000 after November 1, 2002.

Effective February 12, 1998, Nasdaq adopted a rule requiring that the minimum bid price for shares of common stock listed on the Nasdaq National Market equal or exceed \$1.00 per share. During the month prior to the date this Form 10-K was filed with the SEC, the price of our common shares fell below \$1.00 on several occasions. As a matter of practice, Nasdaq generally gives a company a notice of delisting if its common stock trades below \$1.00 for 30 consecutive trading days. After receiving the notice, the company will generally be delisted if the trading price for its common stock has not exceed \$1.00 for 10 consecutive days within 90 days of the date of the notice. (Nasdaq is not, however, required to give a company any grace period and may delist a company's stock immediately after violation of an applicable rule.) Accordingly, if the price of our common shares trades below \$1.00 for a sustained period of time, or if Nasdaq decides to delist our common shares based upon a one-time violation of the bid-price rule, we may be delisted from the Nasdaq National Market.

In addition, on November 1, 2002, we will become subject to new continued listing requirements. Under these new continued listing requirements, we must have at least \$10 million in stockholders' equity, or alternatively, a market capitalization, total assets or total revenue of \$50 million combined with, among other things, a minimum bid price of \$3.00 per share. As of December 31, 2001, our stockholders' equity was \$8,676,494 and our market capitalization, total assets and total revenue are substantially less than \$50 million. If our stockholders' equity does not increase to \$10,000,000 or more by November 1, 2002 (or if we don't comply with the \$50 million market capitalization/asset/revenue and \$3.00 bid price continued listing requirements at that time), we may be delisted from the Nasdaq National Market.

Following such delisting, our common shares would likely be eligible for quotation on the Nasdaq Small Cap, Nasdaq OTC Bulletin Board or other quotation service. Nonetheless, even if our common shares are quoted on an alternative quotation service, the fact of being delisted from the Nasdaq National Market will likely have a negative affect on the price and trading volume for our common shares. Once delisted, our common shares would not be eligible for relisting until, among other things, our common stock traded at or above \$5.00 per share for a sustained period of time.

Future sales of currently restricted securities or common shares subject to outstanding options may affect the market price of our common shares.

In general, Rule 144 of the Securities Act provides that outstanding restricted common shares of Altair may be sold subject to certain conditions beginning one year after issuance and, unless held by an affiliate of Altair, may be sold without limitation beginning two years after issuance. Future sales of currently restricted securities may have a negative effect on the market price of our common shares.

In addition, shares issued upon exercise of options granted pursuant to our employee stock option plans are presently registered under the Securities Act. Subject to certain restrictions on resale by affiliates, such shares may be sold without restriction. The sale of any substantial number of common shares may have a depressive effect on the market price of our common shares.

We have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.

We have never declared or paid cash dividends on our common shares. We currently intend to retain any future earnings, if any, for use in our business and, therefore, do not anticipate paying dividends on our common shares in the foreseeable future.

We may not be able to sell nanoparticles produced using the titanium processing technology.

In the short run, we plan to use the titanium processing technology to produce TiO₂ nanoparticles. TiO₂ nanoparticles are TiO₂ crystals that are approximately one-tenth the size of conventional pigmentary TiO₂ particles. Because of their small size, photocatalytic and ultraviolet shielding capabilities and other unique characteristics, TiO₂ nanoparticles sell at a much higher price than conventional TiO₂ particles and are used in products such as specialty surface coatings, UV protectant cosmetics and battery components.

TiO₂ nanoparticles and other products we intend to initially produce with the titanium processing technology generally must be customized for a specific application working in cooperation with the end user. We are still testing and customizing our TiO₂ nanoparticle products for various applications and have no long-term agreements with end users to purchase any of our TiO₂ nanoparticle products. If we are unable to customize our TiO₂ nanoparticle products to the satisfaction of customers or are otherwise unable to obtain any long-term commitments from end-users of our TiO₂ nanoparticle products, we may be unable to recoup our investment in the titanium processing technology and titanium processing equipment.

In addition, the uses for such nanoparticles are limited, and the market for such nanoparticles is small, estimated at 3,800 tons per annum. In light of the small size of the market, we may not be able to profitably market any proposed nanoparticle products for any of the following reasons:

- there may be insufficient demand for such products;
- despite strong initial demand for any such products, the market for such products may contract as a result of a decrease in demand for goods incorporating such products or other events;
- the increased supply of such products as a result of our entrance into the market may cause the price to drop, reducing or eliminating profitability; and
- competing entities may begin producing, or increase their production of nanoparticles, causing the price to drop or displacing potential sales.

Our costs of production may be too high to permit profitability.

We have not produced any mineral products using our titanium processing technology and equipment on a commercial basis. Our actual costs of production may exceed those of competitors and, even if our costs of production are lower, competitors may be able to sell TiO_2 and other products at a lower price than is economical for Altair.

In addition, even if our initial costs are as anticipated, the titanium processing equipment may break down, prove unreliable or prove inefficient in a commercial setting. If so, related costs, delays and related problems may cause production of TiO_2 nanoparticles and related products to be unprofitable.

We have not completed testing and development of the jig and are presently focusing our resources on other projects.

We have not completed testing of, or developed a production model of, any series of the jig. We do not expect to complete testing and development of the jig during the coming year and have determined to focus most of our limited resources on the titanium processing technology and the Tennessee mineral property. We may never develop a production model of the jig.

Even if we complete development of the jig, the jig may prove unmarketable and may not perform as anticipated in a commercial operation.

The designed capacity of the Series 12 jig is too small for coal washing, heavy minerals extraction, and most other intended applications of the jig, except use in small placer gold mines or similar operations. Even if the Series 12 jig is completed and performs to design specifications in subsequent tests or at a commercial facility, we believe that, because of its small capacity, the potential market for the Series 12 jig is limited.

If we complete development of and begin marketing a production model of the Series 30 jig, it may not prove attractive to potential end users, may be rendered obsolete by competing technologies or may not recover end product at a commercially viable rate. Even if technology included in the jig initially proves attractive to potential end users, performance problems and maintenance issues may limit the market for the jig.

The jig faces competition from other jig-like products and from alternative technologies.

Various jig-like products and alternative mineral processing technologies perform many functions similar or identical to those for which the jig is designed. Results from further tests or actual operations may reveal that these alternative products and technologies are better adapted to any or all of the uses for which the jig is intended. Moreover, regardless of test results, consumers may view any or all of such alternative products and technologies as technically superior to, or more cost effective than, the jig.

Certain patents for the jig have expired, and those that have not expired may be difficult to enforce.

All of the initial patents issued on the jig have expired, and we are unable to prevent competitors from copying the technology once protected by such patents. Additional patents related to the process through which water is pulsed through the cylindrical screen on the jig expire beginning in 2010, and patents for an efficiency-enhancing aspect of the cylindrical screen expire during 2018. The cost of enforcing patents is often significant, especially outside of North America. Accordingly, we may be unable to enforce even our patents that have not yet expired.

We have not completed examining the feasibility of mining the Tennessee mineral property.

We are currently in the process of conducting feasibility testing of the Tennessee mineral property. Because we are at an early stage of testing, we are unable to provide any assurance that mining of the Tennessee mineral property is feasible or to identify all processes that we would need to complete before we could commence a mining operation on the Tennessee mineral property. To the extent early feasibility testing yields positive results, we expect feasibility testing to involve, among other things, the following:

- operating a pilot mining facility to determine mineral recovery efficiencies and the quality of end products;
- additional drilling and sampling in order to more accurately determine the quantity, quality and continuity of minerals on the Tennessee mineral property;
- examining production costs and the market for products produced at the pilot facility;
- designing any proposed mining facility;
- identifying and applying for the permits necessary for any proposed full-scale mining facility; and
- attempting to secure financing for any proposed full-scale mining facility.

Our test production at the pilot plant, economic analysis and additional exploration activities may indicate any of the following:

- that the Tennessee mineral property does not contain heavy minerals of a sufficient quantity, quality or continuity to permit any mining;
- that production costs exceed anticipated revenues;
- that end products do not meet market requirements or customer expectations;
- that there is an insufficient market for products minable from the Tennessee mineral property; or
- that mining the Tennessee mineral property is otherwise not economically or technically feasible.

Even if we conclude that mining is economically and technically feasible on the Tennessee mineral property, we may be unable to obtain the capital, resources and permits necessary to mine the Tennessee mineral property. Market factors, such as a decline in the price of, or demand for, minerals recoverable at the Tennessee mineral property, may adversely affect the development of mining operations on such property. In addition, as we move through the testing process, we may identify additional items that need to be researched and resolved before any proposed mining operation could commence.

We cannot forecast the life of any potential mining operation located on the Tennessee mineral property.

We have not explored and tested the Tennessee mineral property enough to establish the existence of a commercially minable deposit (i.e. a reserve) on such property. Until such time as a reserve is established (of which there can be no assurance), we cannot provide an estimate as to how long the Tennessee mineral property could sustain any proposed mining operation.

We may be unable to obtain necessary environmental permits and may expend significant resources in order to comply with environmental laws.

In order to begin construction and commercial mining on the Tennessee mineral property, we must obtain additional federal, state and local permits. We will also be required to conform our operations to the requirements of numerous federal, state and local environmental laws. Because we have not yet commenced design of a commercial mining facility on the Tennessee mineral property, we are not in a position to definitively ascertain which federal, state and local mining and environmental laws or regulations would

apply to a mine on the Tennessee mineral property. Nevertheless, we anticipate having to comply with and/or obtain permits under the Clean Air Act, Clean Water Act and Resource Conservation and Recovery Act, in addition to numerous state laws and regulations before commencing construction or operation of a mine on the Tennessee mineral property. We can provide no assurance that we will be able to comply with such laws and regulations or obtain any such permits. In addition, obtaining such permits and complying with such environmental laws and regulations may be cost prohibitive.

The market for commodities produced using the jig or at the Tennessee mineral property may significantly decline.

If the jig is successfully developed and manufactured on a commercial basis, we intend to use the jig, or lease the jig for use, to separate and recover valuable, heavy mineral particles. Active international markets exist for gold, titanium, zircon and many other minerals potentially recoverable with the jig. Prices of such minerals fluctuate widely and are beyond our control. A significant decline in the price of minerals capable of being extracted by the jig could have significant negative effect on the value of the jig. Similarly, a significant decline in the price of minerals expected to be produced on the Tennessee mineral property could have a significant negative effect on the viability of a mine or processing facility on such property.

Item 2. Properties

We maintain a registered office at 56 Temperance Street, Toronto, Ontario M5H 3V5. We do not lease any space for, or conduct any operations out of, the Toronto, Ontario registered office. In addition, we lease 900 square feet of office space at 1725 Sheridan Avenue, Suite 140, Cody, Wyoming 82414, which serves as the corporate headquarters for Altair and its subsidiaries. Our lease for the Cody, Wyoming office space may be terminated by either party on 30 days' prior written notice.

Altair Nanomaterials Inc. leases 20,000 square feet of production, laboratory, testing and office space at 204 Edison Way, Reno, Nevada, 89502. The monthly rent for the space is \$16,153, and although the initial term of the lease expired on December 31, 2000, it is subject to automatic renewal for six-month periods at inflation-adjusted rent until terminated by Altair. The lease grants us a right of first refusal in the event BHP proposes to sell the building and property subject to the lease and includes an agreement to negotiate in good faith with respect to our possible purchase of such building and property.

Fine Gold and MRS lease 5,700 square feet of office space at 230 South Rock Boulevard, Suite 21, Reno, Nevada 89502. The lease for the Reno, Nevada offices expired on January 31, 2002 but has been continued on a month-to-month basis with the provision that either party may terminate the lease on 30 days' prior written notice. MRS leases approximately 1,550 square feet of laboratory space at 7950 Security Circle, Reno, Nevada 89506, for its jig testing operations. The test facility lease may be terminated by either party upon eight weeks prior written notice. We believe that the existing offices and test facilities of Altair and its subsidiaries are adequate for our current needs. In the event that alternative or additional office space is required, we believe we could obtain additional space on commercially acceptable terms.

The Tennessee mineral property consists of approximately 9,700 acres of real property located near Camden, Tennessee, which MRS leases from multiple owners of the real property. Such leases grant MRS certain exclusive rights, including the right to explore, test, mine, extract, process, and sell any minerals or other materials found on the land, in exchange for the payment of minimum annual advanced royalty payments prior to commencement of production on the properties (or after commencement of production, to the extent production royalty payments do not equal nominal royalty payments) and, thereafter, production royalty payments in an amount equal to a percentage of the value of minerals mined and sold from the property. See the Notes to the Consolidated Financial Statements for information regarding present and future minimum advance royalty payments. The leases typically are for a minimum term of ten years, and may be extended

indefinitely at MRS' option, provided Altair is actively conducting exploration, development, or mining operations. The leases are cancelable by MRS at any time, and are cancelable by the lessor in the event MRS breaches the terms of the lease. The minerals on the Tennessee mineral property have not yet proven to be a reserve, and our operations and proposed plan with respect to it are exploratory in nature. See "Item 1. Business—Tennessee Mineral Property." The Tennessee mineral property is accessed by public roads and, to our knowledge, has not been used in prior mining operations.

Item 3. *Legal Proceedings*

We are from time to time involved in routine litigation incidental to the conduct of our business. We are currently not involved in any suit, action or other legal proceedings, nor are we aware of any threatened suit, action or other legal proceedings which management believes will materially and adversely affect the business or operations of Altair or its subsidiaries.

Item 4. *Submission of Matters to a Vote of Security Holders*

We did not submit any matters to a vote of security holders during the fourth quarter of the 2001 fiscal year.

PART II

Item 5. *Market for the Common Shares and Related Shareholder Matters*

Market Price

Our common shares are traded on the Nasdaq National Market under the symbol "ALTI." The following table sets forth, for the periods indicated, the high and low bid quotations for our common shares, as reported on the Nasdaq National Market.

| Fiscal Year Ended December 31, 2000 | Low | High |
|--------------------------------------------------|------------|-------------|
| 1st Quarter | \$ 3.563 | \$ 9.250 |
| 2nd Quarter | 2.000 | 5.375 |
| 3rd Quarter | 1.000 | 4.469 |
| 4th Quarter | 0.688 | 3.375 |
| Fiscal Year Ended December 31, 2001 | Low | High |
| 1st Quarter | \$ 1.000 | \$ 3.406 |
| 2nd Quarter | \$ 1.969 | \$ 2.890 |
| 3rd Quarter | \$ 1.230 | \$ 2.710 |
| 4th Quarter | \$ 1.010 | \$ 1.790 |

The quotations set forth above reflect inter-dealer prices, without retail mark-up, mark down or commission and may not represent actual transactions. The last sale price of our common shares, as reported on the Nasdaq National Market, on March 26, 2002 was \$1.21 per share.

Outstanding Shares and Number of Shareholders.

As of March 22, 2002, the number of common shares outstanding was 22,813,120 held by 467 holders of record. In addition, as of the same date, we have reserved 5,241,700 common shares for issuance upon exercise of options that have been, or may be, granted under our employee stock option plans and 4,837,007 common shares for issuance upon exercise of outstanding warrants.

Dividends

We have never declared or paid cash dividends on our common shares. Moreover, we currently intend to retain any future earnings for use in our business and, therefore, do not anticipate paying any dividends on our common shares in the foreseeable future.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common shares is Equity Transfer Services, Inc., Suite 420, 120 Adelaide Street West, Toronto, Ontario, M5H 4C3.

Canadian Taxation Considerations

Dividends paid on common shares owned by non-residents of Canada are subject to Canadian withholding tax. The rate of withholding tax on dividends under the Income Tax Act (Canada) (the "Act") is 25%. However, Article X of the reciprocal tax treaty between Canada and the United States of America (the "Treaty") generally limits the rate of withholding tax on dividends paid to United States residents to 15%. The Treaty further generally limits the rate of withholding tax to 5% if the beneficial owner of the dividends is a U.S. corporation which owns at least 10% of the voting shares of the Company.

If the beneficial owner of the dividend carries on business in Canada through a permanent establishment in Canada, or performs in Canada independent personal services from a fixed base in Canada, and the shares of stock with respect to which the dividends are paid is effectively connected with such permanent establishment or fixed base, the dividends are taxable in Canada as business profits at rates which may exceed the 5% or 15% rates applicable to dividends that are not so connected with a Canadian permanent establishment or fixed base. Under the provisions of the Treaty, Canada is permitted to apply its domestic law rules for differentiating dividends from interest and other disbursements.

A capital gain realized on the disposition of common shares by a person resident in the United States ("a non-resident") will be subject to tax under the Act if the shares held by the non-resident are "taxable Canadian property." In general, common shares will be taxable Canadian property if the particular non-resident used (or in the case of a non-resident insurer, used or held) the Common Stock in carrying on business in Canada or, pursuant to proposed amendments to the Act, where at any time during the five-year period immediately preceding the realization of the gain, not less than 25% of the issued and outstanding shares of any class or series of shares of the Company were owned by the particular non-resident, by persons with whom the particular non-resident did not deal at arms' length, or by any combination thereof. If common shares constitute taxable Canadian property, relief nevertheless may be available under the Treaty. Under the Treaty, gains from the alienation of common shares owned by a non-resident who has never been resident in Canada generally will be exempt from Canadian capital gains tax if the shares do not relate to a permanent establishment or fixed base which the non-resident has or had in Canada, and if not more than 50% of the value of the shares was derived from real property (which includes rights to explore for or to exploit mineral deposits) situated in Canada.

Item 6. Selected Financial Data

The following table sets forth selected consolidated financial information with respect to the Company and its subsidiaries for the periods indicated. The data is derived from financial statements prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The selected financial data should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and accompanying notes included herein. All amounts are stated in U.S. dollars.

| For the Year Ended December 31, | 2001 | 2000 | 1999 | 1998 | 1997 |
|-----------------------------------------------------------------|---------------|---------------|----------------|---------------|---------------|
| STATEMENTS OF OPERATIONS | | | | | |
| Revenues..... | \$ 42,816 | \$ None | \$ None | \$ None | \$ None |
| Operating expenses..... | \$ 6,046,173 | \$ 6,647,367 | \$ 3,729,534 | \$ 3,842,441 | \$ 2,885,043 |
| Interest expense..... | \$ 1,881,077 | \$ 215,216 | \$ 1,966 | \$ 959,612 | \$ 43,497 |
| Interest income..... | \$ (148,980) | \$ (83,440) | \$ (134,811) | \$ (335,037) | \$ (70,059) |
| (Gain) loss on foreign exchange.... | \$ 402 | \$ (864,669) | \$ 160,619 | \$ 17,109 | \$ 123,612 |
| (Gain) on forgiveness of debt..... | \$ - | \$ - | \$ (67,442) | \$ (25,805) | \$ - |
| Loss on redemption of convertible debentures..... | \$ - | \$ - | \$ - | \$ 193,256 | \$ - |
| Net Loss..... | \$ 7,754,031 | \$ 5,914,474 | \$ 3,689,866 | \$ 4,651,576 | \$ 2,982,093 |
| Basic and diluted net loss per common share from operations. | \$ 0.39 | \$ 0.34 | \$ 0.24 | \$ 0.31 | \$ 0.21 |
| Cash dividends declared per common share..... | \$ - | \$ - | \$ - | \$ - | \$ - |
| Deficit, beginning of year..... | \$ 21,606,378 | \$ 15,691,904 | \$ 12,002,038 | \$ 7,350,462 | \$ 4,368,369 |
| Net loss..... | 7,754,031 | 5,914,474 | 3,689,866 | 4,651,576 | 2,982,093 |
| Preferential warrant dividend..... | 52,417 | - | - | - | - |
| Deficit, end of year..... | \$ 29,412,826 | \$ 21,606,378 | \$ 15,691,904 | \$ 12,002,038 | \$ 7,350,462 |
| BALANCE SHEET DATA | | | | | |
| Working capital..... | \$ (81,154) | \$ 234,714 | \$ (5,931,717) | \$ 3,008,789 | \$ 7,480,153 |
| Total assets..... | \$ 10,853,243 | \$ 16,651,770 | \$ 13,365,848 | \$ 7,103,267 | \$ 12,956,079 |
| Long-term obligations..... | \$ 1,462,060 | \$ 2,689,493 | \$ - | \$ 31,091 | \$ 4,774,420 |
| Current liabilities..... | \$ 714,689 | \$ 3,741,366 | \$ 7,578,083 | \$ 222,431 | \$ 712,810 |
| Net shareholders' equity..... | \$ 8,676,494 | \$ 10,220,911 | \$ 5,787,765 | \$ 6,849,745 | \$ 7,468,849 |

The following Supplementary Financial Information for the fiscal quarters ended March 31, June 30, September 30 and December 31 in each of the years 2000 and 2001 were derived from our unaudited quarterly consolidated financial statements filed by us with the SEC in our Quarterly Reports on Form 10-Q with respect to such periods (except for 4th quarter data which was determined by comparing annual financial data with 3rd quarter financial data).

Supplementary Financial Information by Quarter, 2001 and 2000

| | Quarter Ended March 31 | Quarter Ended June 30 | Quarter Ended September 30 | Quarter Ended December 31 |
|--------------------------------------|---------------------------|--------------------------|-------------------------------|------------------------------|
| Year Ended December 31, 2001: | | | | |
| Sales | None | None | None | \$42,816 |
| Gross Margin | None | None | None | 18,175 |
| Net loss | \$1,903,774 | \$2,335,304 | \$1,600,556 | \$1,914,397 |
| Loss per common share: (1) | | | | |
| Basic and Diluted | \$0.10 | \$0.12 | \$0.08 | \$0.09 |
| Year Ended December 31, 2000: | | | | |
| Sales | None | None | None | None |
| Gross Margin | None | None | None | None |
| Net loss | \$904,997 | \$1,335,728 | \$1,881,245 | \$1,792,504 |
| Loss per common share: (1) | | | | |
| Basic and Diluted | \$0.06 | \$0.08 | \$0.10 | \$0.09 |

(1) Loss per common share is computed independently for each of the quarters presented. Therefore, the sum of the quarterly loss per common share amounts does not necessarily equal the total for the year.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations.*

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto.

Overview

From inception through the end of 1993, our business consisted principally of the exploration of mineral properties for acquisition and exploration. During 1994, our focus changed as we became engaged in the acquisition, development and testing of mineral processing equipment for use in the recovery of fine, heavy mineral particles including gold, titanium, zircon and environmental contaminants. Since that time, we have continued exploring mineral properties on which we might use our patented mineral processing equipment.

In 1996, we acquired all patent rights to the Campbell Centrifugal Jig, since modified and renamed the Altair Centrifugal Jig. Since April 1996, we have acquired mineral leaseholds on approximately 9,700 acres of land in Tennessee. A prefeasibility study issued in July 1998 confirmed the existence of heavy minerals and suggests that the property warrants further exploration. Based on the results of these independent studies, we have initiated additional feasibility testing.

In November 1999, we acquired all patent applications and technology related to a hydrometallurgical process developed by BHP primarily for the production of titanium dioxide products from titanium bearing ores or concentrates (i.e., the "titanium processing technology") and all tangible equipment and other assets (i.e., the "titanium processing assets") used by BHP to develop and implement the titanium processing technology.

Results of Operations.

Operating losses before extraordinary items totaled \$7,754,031 (\$0.39 per share) for the 2001 fiscal year, \$5,914,474 (\$0.34 per share) for the 2000 fiscal year, and \$3,757,308 (\$0.24 per share) for the 1999 fiscal year. Principal factors contributing to the losses during these periods were the lack of substantial revenues coupled with the incurrence of operating expenses.

Fiscal Year 2001 vs. 2000

During 2001, Altair Nanomaterials generated \$42,816 of revenues through sales of TiO₂ nanoparticles, lithium titanate nanoparticles and other materials. TiO₂ nanoparticle sales represented 70% of revenues during 2001 with the primary application for this product being thermal spray coatings. Sales revenues in 2001 included \$16,985 of previously deferred revenues for which product shipments were made in 2001.

Mineral exploration and development expenses decreased from \$1,217,966 in 2000 to \$930,777 in 2001. During 2000, we began construction of a mineral processing pilot plant at the Tennessee mineral property. In connection with such construction, we incurred \$413,000 of costs for permitting, design and construction of the plant site and ancillary facilities, and \$388,000 for design and fabrication of the processing equipment. During 2001, we incurred \$188,000 of costs to complete construction of the pilot plant. This decline in construction costs from 2000 to 2001 was partially offset by the incurrence of operating costs at the plant.

Research and development expense decreased from \$1,555,472 in 2000 to \$559,454 in 2001. On January 1, 2001, we hired fourteen former BHP employees who had been involved in the development of the titanium processing technology that we acquired from BHP in November 1999. When we acquired the titanium processing technology, we entered into a services agreement with BHP under which we obtained the services of these fourteen individuals, and certain other BHP employees, for the period November 15, 1999 through December 31, 2000. In 2000, the cost associated with this services agreement was \$1,368,000 and was charged to research and development expense. During 2001, of the \$1,190,000 in total salaries and overheads, \$354,000 was allocated to research and development expense, resulting in a decrease of \$996,000 in research and development expense in 2001 from 2000.

Professional services, which consist principally of legal, consulting and audit expenses, increased from \$366,275 in 2000 to \$593,088 in 2001. In the first quarter of 2001, we hired new auditors to audit our financial statements. As a result of this, our audit fees increased from \$26,000 in 2000 to \$157,000 in 2001. We also experienced an increase in legal fees from \$176,000 in 2000 to \$198,000 in 2001, primarily as a result of preparation of regulatory filings and other documents associated with recent financing activities. Consulting expenses increased from \$164,000 in 2000 to \$238,000 in 2001, also as a result of recent financing activities.

General and administrative expenses increased by \$553,396 to \$2,824,646 in 2001, compared to \$2,271,250 in 2000. Salaries and overheads increased by \$820,000 to \$1,268,000 in 2001, compared to \$448,000 in 2000, as a result of hiring the fourteen former BHP employees, the president of Altair Nanomaterials, a marketing manager and a general counsel. With respect to the titanium processing technology, we experienced an increase in expenses of \$245,000 to \$610,000 in 2001, compared to \$365,000 for 2000, for operating supplies, small tools, maintenance, office supplies and production of product samples. Our general corporate expenses decreased by \$508,000 to \$738,000 in 2001, compared to \$1,246,000 for 2000, principally due to a decrease in expense recognized for options granted to employees and service providers.

Depreciation and amortization expense decreased by \$98,196 to \$1,138,208 in 2001, compared to \$1,236,404 for 2000, principally as a result of lengthening the amortization periods of certain patents. The amortization periods were extended to equal the patent lives.

On December 15, 2000, we and an investor entered into a Securities Purchase Agreement pursuant to which we issued to the investor a \$7,000,000 Asset-Backed Exchangeable Term Note (the "2000 Note") and

a Warrant to purchase 350,000 common shares at an initial exercise price of \$3.00 at any time on or before December 15, 2005 (the "Warrant"). The 2000 Note, Warrant and related rights were sold to the investor in exchange for \$7,000,000 (less financing fees). Proceeds from the 2000 Note were allocated between the 2000 Note and the Warrant; the portion allocated to the Warrant resulted in a discount on the 2000 Note which was being accreted to interest expense over the term of the 2000 Note. Interest expense for 2001 was \$1,881,077, compared to interest expense of \$215,216 in 2000. The increase results from interest expense of \$805,000 on the 2000 Note, amortization of the Warrant discount of \$403,000, amortization of debt issue costs of \$100,000 and interest related to the issuance of common shares as payment of principal and interest on the 2000 Note of \$301,000. In addition to this, interest expense of \$240,000 was incurred related to the estimated fair value of warrants issued to the investor in exchange for the waiver of penalties that would have accrued due to late effectiveness of the registration statement associated with the 2000 Note and modification to the 2000 Note terms involving the redemption of exchange amounts. At the same time, interest income increased in 2001 over 2000 due to interest earned on the proceeds received from the 2000 Note.

The purchase price for the titanium processing technology that we acquired from BHP was stated in Australian dollars and was payable in installments through August 2000. During 2000, the United States dollar strengthened against the Australian dollar resulting in a gain on foreign exchange of \$864,000.

Fiscal Year 2000 vs. 1999

Mineral exploration and development expenses increased from \$714,893 in 1999 to \$1,217,966 in 2000, principally due to costs incurred in the construction of the mineral processing pilot plant at the Tennessee mineral property. Construction began in 2000 and total construction costs of \$801,000 were incurred during that year. This increase was partially offset by decreases in other mineral exploration expenses at the Tennessee mineral property.

Since acquiring the titanium processing technology and titanium processing assets from BHP in November 1999, we have directed our efforts toward the production and marketing of TiO₂ nanoparticles. Our acquisition of the titanium processing technology and titanium processing assets in late 1999, and our subsequent production and marketing efforts during 2000, caused a significant increase in our operating expenses for the year ended December 31, 2000 when compared to the year ended December 31, 1999.

In connection with the acquisition, we entered into a services agreement with BHP wherein BHP agreed to provide, through December 31, 2000, certain services necessary to continue development and testing of the titanium processing technology and operation of the titanium processing assets. The costs associated with this service agreement were approximately \$1,368,000 for the year ended December 31, 2000 and were recorded as testing, research and development expense. Our comparable expense during the year ended December 31, 1999 was \$171,000.

We also entered into a lease agreement with BHP to lease the space occupied by the titanium processing assets at a BHP facility in Reno, Nevada. The lease cost was \$180,000 for the year ended December 31, 2000 and is included in general and administrative expenses in the Consolidated Statements of Operations. We incurred \$22,500 of comparable lease costs for the year ended December 31, 1999. General and administrative expenses also increased by \$80,000 due to the recognition of expense associated with options and warrants, by \$75,000 due to the addition of one new employee, by \$20,000 due to insurance costs for coverages on the titanium processing assets and by \$34,000 due to additional Nasdaq listing fees in connection with the issuance of common shares.

Professional services for the year ended December 31, 2000 increased over the comparable period of 1999 due to legal costs associated with patent reviews and trademark filings related to the titanium processing technology and consulting costs for marketing and production management related to TiO₂ nanoparticle products.

Depreciation expense in 2000 increased over 1999 as a result of depreciation on the titanium processing technology and titanium processing assets acquired from BHP.

The purchase price for the titanium processing technology and titanium processing assets was 15,000,000 Australian dollars ("AUD\$") (U.S.\$9,625,500) and was payable in four equal installments. The first installment was paid at closing in November 1999, the second and third installments were paid on May 12, 2000 and the remaining payment was paid on August 1, 2000. Since the purchase price was payable in Australian dollars, the liability to BHP was subject to exchange rate fluctuations. From December 31, 1999 to March 31, 2000, the American dollar strengthened significantly against the Australian dollar, resulting in a gain on foreign exchange of approximately \$559,000. From April 1, 2000 through June 30, 2000, the American dollar strengthened further, resulting in a gain on foreign exchange of approximately \$237,000. When the final payment was paid on August 1, 2000, an additional foreign exchange gain of approximately \$69,000 was realized, resulting in a total foreign exchange gain on the purchase of the titanium processing technology and titanium processing assets of approximately \$865,000 for the year ended December 31, 2000.

Interest on long-term debt increased by \$79,000 in the year ended December 31, 2000 over the comparable period of 1999 due to interest paid in connection with the rescheduling of the second installment due BHP from February 15, 2000 to May 15, 2000. It further increased by \$129,000 due to interest charges associated with the 2000 Note, which we issued in December 2000.

Interest income in 2000 decreased from 1999 as we had lower cash balances available for investment during most of the year.

Carrying Value of Assets

We have recorded our investments in the titanium processing technology and titanium processing assets and the centrifugal jig at actual cost. We depreciate such assets using the straight-line method over their estimated useful life. The asset carrying value is the actual cost less accumulated depreciation. We assess the carrying values of these assets on a quarterly basis by comparing the projected undiscounted cash flows to be generated by the assets to the carrying costs of the assets. In order to determine the projected cash flows related to these assets, we use the information and feedback obtained from prospective customers together with general information as to product markets, competitive forces and our production capability to arrive at assumptions with respect to sales volumes and pricing. We next estimate costs of sales based on engineering analysis and actual experience. Operating margins are then calculated based on these assumptions and compared to the carrying cost of the assets. Delays in revenue generation may make the recoverability of our assets less likely.

When we acquired the titanium processing technology and titanium processing assets from BHP, the core technology for producing titanium dioxide nanoparticles was completely developed, a pilot plant was under construction, and we believed the titanium processing technology and titanium processing assets had near-term commercial value. We expected to complete the pilot plant as a processing facility and begin generating sales revenues through nanoparticle product sales in 2000. We completed construction of the processing facility and made a single small sale of nanoparticles in 2000, and then generated \$42,816 of sales revenues in 2001. We underestimated the length of time required for sample analysis and product acceptance by prospective customers and by their customers and, as a result, we have not yet made a substantial amount of nanoparticle sales. We presently estimate that significant nanoparticle sales will begin during the second half of 2002 and that cash flows from future nanoparticle sales will be in excess of the carrying value of the assets. The delay in sales, combined with cash outlays for construction and operation, has affected our cash position and financing plans as more fully described in "Liquidity and Capital Resources" below.

We intend to use our centrifugal jig to enhance the recovery of heavy minerals at our Tennessee mineral property, and it also has the potential to be sold or licensed to others on a commercial basis. Marketing efforts for the jig have focused on large volume applications such as coal cleaning, heavy mineral sand separations and

iron ore processing. Such applications require potential jig purchasers to make significant capital investments and reengineering of plant processes. As a result, potential purchasers in this arena require lengthy equipment evaluations and long testing periods. Since 2000, we have redirected company resources, staff and liquid assets to support the titanium processing technology and Camden exploration effort and away from marketing the jig to others. We are currently negotiating an agreement to perform jig tests for fine particle recovery at a third party's processing facility, and we have entered into discussions with potential jig manufacturers and distributors for marketing the jig to a wider array of market applications under licensing and/or distributorship agreements. We retain ownership of the fundamental technical characteristics of the jig through patent protections. We estimate that future revenues to be derived from jigs placed into commercial operation will be in excess of the carrying value of the assets.

Liquidity and Capital Resources.

We generated \$42,816 of sales revenues in 2001 but incurred a net loss of \$7,754,031. At December 31, 2001, our accumulated deficit was \$29,412,826, or an increase of \$7,806,448 over the accumulated deficit at December 31, 2000. This increase was due to the net loss for the year and a preferential warrant dividend of \$52,417 recorded in connection with the repricing of certain warrants during 2001.

Our cash and short-term investments decreased from \$3,585,729 at December 31, 2000 to \$599,884 at December 31, 2001, due to the incurrence of operating costs and the effect of financing transactions which are described below.

On December 15, 2000, we and an investor entered into a Securities Purchase Agreement pursuant to which we issued the 2000 Note and the Warrants. The 2000 Note, Warrant and related rights were sold to the investor in exchange for \$7,000,000 (less financing fees). Among certain other covenants, we agreed to maintain a letter of credit in favor of the investor in an amount equal to 57.15% of the principal balance of the 2000 Note until certain conditions were met, after which the required amount would be reduced to 50% of the principal balance of the 2000 Note. The letter of credit was secured by cash proceeds from issuance of the 2000 Note equal to the face amount of the letter of credit. Such cash proceeds are reflected as restricted cash in the Consolidated Balance Sheets.

The 2000 Note was in the principal amount of \$7,000,000 with interest at a rate of 10% per annum. Under the 2000 Note, we were required to make monthly payments on or before the 15th day of each calendar month in the principal amount of \$291,667 plus accrued interest (the "Monthly Payment Amount"). The 2000 Note was due and payable in full on December 15, 2003.

We had the option to redeem the Monthly Payment Amount in cash. If we elected not to redeem the Monthly Payment Amount, on each due date, the holder of the 2000 Note automatically received the right to exchange (immediately or at any later date during the term) the Monthly Payment Amount into common shares at the applicable "Exchange Price." The Exchange Price for any date was the lesser of (a) a fixed exchange price of \$3.00 as adjusted, or (b) the average of the lowest three daily trading prices of the common shares during the 15 trading days ending on the day before an exchange right was exercised. The 2000 Note was secured by a pledge of the intellectual property and common stock of Altair Nanomaterials, Inc. and the common stock of Mineral Recovery Systems, Inc.

During 2001, we made cash payments of principal and interest against the 2000 Note of \$1,894,000 and \$387,000, respectively, and paid \$1,220,000 of principal and interest through the exchange of 824,800 shares of our common stock in accordance with the terms of the 2000 Note. In addition, we made payments of principal and interest against the 2000 Note of \$97,743 and \$244,941, respectively, through cancellation of call options on 228,456 shares of our common stock.

On December 28, 2001, we entered into a Termination and Issuance Agreement with the holder of the 2000 Note under which the letter of credit was terminated, \$2,500,733 of cash securing the letter of credit was

transferred to the investor, and the 2000 Note was exchanged for a new Secured Term Note ("2001 Note") having a face amount of \$2,000,000. The interest rate on the 2001 Note is 11% per annum payable monthly. Under the 2001 Note, we are not required to make monthly payments of principal but are required to pay accrued interest at the end of every month. We have the right to redeem the monthly interest payment in cash. If we elect not to redeem the monthly interest payment amount in cash, on each due date, the investor automatically receives the right to exchange (immediately or at any later date during the term) the monthly interest payment amount into common shares at the applicable exchange price. The exchange price for any date is equal to 75% of the average of the closing price of our common stock for the five trading days ending on the trading day immediately preceding the respective due date for payment of interest. The principal amount of the 2001 Note is not convertible into or exchangeable for common shares and is due and payable in cash on March 31, 2003.

In connection with the 2001 Note, we issued to the investor 200,000 warrants to purchase common shares at an exercise price of \$1.50. The warrants are exercisable at any time on or before the earlier of (a) December 15, 2006, and (b) the date 60 days after the market price of the common shares has been equal to or greater than \$12.00 for five consecutive days. In addition, we agreed to revise the exercise price of the 350,000 warrants issued with the 2000 Note to \$1.50. We also issued to the investor a conditional warrant to purchase up to 500,000 common shares. The conditional warrant expires on the later of March 31, 2003 or the date the 2001 Note has been paid in full. The warrant is subject to a vesting schedule under which 25,000 common shares vest when the closing price of our common stock exceeds \$2.00 per share for a period of ten consecutive trading days. Thereafter, additional common shares vest in increments of 25,000 on the day following the first time the closing price exceeds a number greater than \$2.00 that is evenly divisible by .5 (e.g. \$2.50, \$3.00, \$3.50) for ten consecutive trading days. To date, no shares have vested under the conditional warrant. The warrant exercise price is \$.01 per common share.

Under the terms of the 2001 Note, we are required to have a minimum cash and cash equivalents balance of \$250,000 at the end of each calendar quarter and at any time the closing price of our common shares has been below \$1.00 per share for three consecutive trading days.

The 2001 Note is secured by a pledge of the equipment, intellectual property and common stock of Altair Nanomaterials, and by a pledge of the leaseholds and common stock of MRS.

During 2001, we sold 2,031,691 common shares together with 2,766,668 warrants in private placements for gross proceeds of \$2,650,000. The warrants are exercisable at prices ranging from \$1.50 to \$5.00 and expire on the earlier of five years from the date of issue or on specified dates after the closing price equals or exceeds prices ranging from \$2.50 to \$8.00. Also during 2001, 65,000 options were exercised providing us with gross proceeds of \$130,000.

On October 18, 2001, we reduced the exercise price of 255,000 outstanding warrants to \$1.00 per share for a period of 45 days and we reduced the exercise price of 458,333 outstanding warrants to \$1.00 per share through December 14, 2001. The warrants had been previously issued with exercise prices ranging from \$4.00 to \$8.00. All 713,333 warrants were exercised resulting in proceeds to us of \$713,333.

At December 31, 2001, we had cash and cash equivalents of \$599,884, an amount which, together with proceeds received from a private placement in early 2002 (as discussed below), is sufficient to fund our basic operations through April 30, 2002. After April 30, 2002, we will require additional financing to provide working capital to fund our day-to-day operations. We will also require additional financing to continue our development work on the titanium processing technology and the Tennessee mineral property, and to expand our nanoparticle production facility when, and if, current capacity cannot keep pace with product sales. We expect to generate funds through additional private placements of our common stock and warrants to purchase our common stock, additional exercises of warrants and sales of titanium dioxide nanoparticles. On March 11, 2002, we entered into a stock subscription agreement with a private investor which provides for the sale,

for \$1,000,000 on or before May 31, 2002, of 666,667 common shares and 1,000,002 warrants to purchase common shares at exercise prices between \$2.00 and \$3.00 per share. As of March 20, 2002, we have no commitments to provide additional financing or to purchase titanium dioxide nanoparticles.

Item 8. *Financial Statements and Supplementary Data.*

The financial statements required by this Item appear on pages F-1 through F-22 of this Form 10-K.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.*

None.

PART III

Item 10. *Directors and Executive Officers of the Registrant*

The information required by this Item is incorporated by reference to the section entitled "Election of Directors" in the Company's definitive proxy statement to be filed with the Commission.

Item 11. *Executive Compensation*

The information required by this Item is incorporated by reference to the section entitled "Executive Compensation" in the Company's definitive proxy statement to be filed with the Commission.

Item 12. *Security Ownership of Certain Beneficial Owners and Management*

The information required by this Item is incorporated by reference to the section entitled "Security Ownership of Certain Beneficial Owners and Management" in the Company's definitive proxy statement to be filed with the Commission.

Item 13. *Certain Relationships and Related Transactions*

The information required by this Item is incorporated by reference to the section entitled "Certain Relationships and Related Transactions" in the Company's definitive proxy statement to be filed with the Commission.

Item 14. *Exhibits, Financial Statement Schedules and Reports on Form 8-K*

(a) Documents Filed

1. *Financial Statements.* The following Consolidated Financial Statements of the Company and Auditor's Report are filed as part of this Annual Report on Form 10-K:

- Independent Auditors' Report of Deloitte & Touche LLP
- Consolidated Balance Sheets, December 31, 2001 and 2000
- Consolidated Statements of Operations for Each of the Three Years in the Period Ended December 31, 2001 and for the Period from April 9, 1973 (Date of Inception) to December 31, 2001

- Consolidated Statements of Shareholders' Equity from April 9, 1973 (Date of Inception) to December 31, 2001
- Consolidated Statements of Cash Flows for Each of the Three Years in the Period Ended December 31, 2001 and for the Period from April 9, 1973 (Date of Inception) to December 31, 2001
- Notes to Consolidated Financial Statements

2. *Financial Statement Schedule.* Not applicable.

3. *Exhibit List*

| Exhibit No. | Exhibit | Incorporated by Reference/ Filed Herewith |
|-------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.1.1 | Articles of Incorporation of the Registrant | Incorporated by reference to Registration Statement on Form 10-SB filed with the Commission on November 25, 1996. |
| 3.1.2 | Amendment to Articles of Incorporation of the Registrant dated November 6, 1996 | Incorporated by reference to Amendment No. 1 to Registration Statement on Form 10 filed with the Commission on December 23, 1996. |
| 3.2 | Bylaws of the Registrant | Incorporated by reference to Registration Statement on Form 10-SB filed with the Commission on November 25, 1996. |
| 4.1 | Form of Common Stock Certificate | Incorporated by reference to Registration Statement on Form 10-SB filed with the Commission on November 25, 1996. |
| 4.2 | Amended and Restated Shareholder Rights Plan dated October 15, 1999, between the Company and Equity Transfer Services, Inc. | Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on November 19, 1999. |
| 4.3 | Form of Doral Warrant (Issued December 15, 2000) | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on December 26, 2000. |
| 4.5 | \$2,000,000 Secured Term Note | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002. |
| 4.6 | Warrant to Purchase Common Stock (Issued December 28, 2001) | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002. |
| 4.7 | Warrant to Purchase Common Stock (Conditional) (Issued December 28, 2001) | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002. |
| 4.8 | Amendment No. 1 to Stock Purchase Warrants | Incorporated by reference to Amendment No. 2 to Current Report on Form 8-K/A filed with the SEC on January 2, 200 |
| 4.9 | Form of Series 2001C Warrant | Incorporated by reference to Registration Statement on Form S-3, File No. 333-76820, filed with the Commission on January 16, 2002. |
| 4.10 | Form of Series 2001D Warrant | Incorporated by reference to Registration Statement on Form S-3, File No. 333-76820, filed with the Commission on January 16, 2002. |
| 4.11 | Form of Series 2001E Warrant | Incorporated by reference to Registration Statement on Form S-3, File No. 333-76820, filed with the Commission on January 16, 2002. |
| 4.12 | Form of Series 2001F Warrant | Incorporated by reference to Registration Statement on Form S-3, File No. 333-76820, filed with the Commission on January 16, 2002. |
| 4.13 | Form of Series 2001G Warrant | Incorporated by reference to Registration Statement on Form S-3, File No. 333-76820, filed with the Commission on January 16, 2002. |
| 10.1 | Employment Agreement between Altair International Inc. and William P. Long dated January 1, 1998 | Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Commission on March 31, 1998, as amended by Amendment No. 1 to Annual Report on Form 10-K/A filed on May 15, 1998. |

| | | |
|-------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.2 | Employment Agreement between Fine Gold Recovery Systems Inc. and C. Patrick Costin dated August 15, 1994 | Incorporated by reference to Registration Statement on Form 10-SB filed with the Commission on November 25, 1996. |
| 10.3 | Altair International Inc. Stock Option Plan adopted by shareholders on May 10, 1996 | Incorporated by reference to the Company's Registration Statement on Form S-8 filed with the Commission on July 11, 1997. |
| 10.4 | 1998 Altair International Inc. Stock Option Plan adopted by Shareholders on June 11, 1998 | Incorporated by reference to the Company's Definitive Proxy Statement on Form 14A filed with the Commission on May 12, 1998. |
| 10.5 | Form of Mineral Lease | Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Commission on March 31, 1998, as amended by Amendment No. 1 to Annual Report on Form 10-K/A filed on May 15, 1998. |
| 10.6 | Lease dated November 15, 1999, between the Company and BHP Minerals International Inc. | Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on November 19, 1999. |
| 10.7 | Asset Purchase and Sale Agreement dated November 15, 1999, between the Company and BHP Minerals International Inc | Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on November 19, 1999. |
| 10.8 | Stock Pledge Agreement dated December 15, 2000 (Mineral Recovery Systems common stock). | Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on December 26, 2000. |
| 10.9 | Stock Pledge Agreement dated December 15, 2000 (Altair Technologies common stock). | Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on December 26, 2000. |
| 10.10 | Research Agreement dated August 1, 2000 | Incorporated by reference to the Company's Amendment No. 1 on Form 10-K/A filed with the Commission on April 17, 2001 |
| 10.11 | Note Termination and Issuance Agreement | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002. |
| 10.12 | Registration Rights Agreement | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002. |
| 10.13 | First Amendment to Stock Pledge Agreement | Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002. |
| 23 | Auditor's Consent | Filed herewith. |
| 24 | Power of Attorney | Included on the Signature Page hereof. |

(b) Reports on Form 8-K

The Company filed a Current Report on Form 8-K on January 4, 2002 in which it reported the termination of the 2000 Note, the issuance of the 2001 Note and related transactions.

The Company filed an Amendment No. 2 to Current Report on Form 8-K/A on January 4, 2002 (amending the Current Report on Form 8-K filed on December 26, 2000) in which it reported the termination of the 2000 Note, the amendment of certain warrants issued in connection with the 2000 Note and related transactions.

(c) Exhibits

Exhibits to this Report are attached following page F-22 hereof.

(d) Financial Statement Schedule

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 28, 2002.

ALTAIR INTERNATIONAL INC.

By: /s/ WILLIAM P. LONG

William P. Long,
President, Chief Executive Officer

POWER OF ATTORNEY AND ADDITIONAL SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this Form 10-K has been signed by the following persons in the capacities and on the dates indicated. Each person whose signature to this Form 10-K appears below hereby constitutes and appoints William P. Long and Edward Dickinson, and each of them, as his true and lawful attorney-in-fact and agent, with full power of substitution, to sign on his behalf individually and in the capacity stated below and to perform any acts necessary to be done in order to file all amendments and post-effective amendments to this Form 10-K, and any and all instruments or documents filed as part of or in connection with this Form 10-K or the amendments thereto and each of the undersigned does hereby ratify and confirm all that said attorney-in-fact and agent, or his substitutes, shall do or cause to be done by virtue hereof.

| Signature | Title | Date |
|-------------------------------------------------|---------------------------------------------------------------------------------------|----------------|
| <u>/s/ WILLIAM P. LONG</u> William P. Long | President and Chief Executive Officer and Director (Principal Executive Officer) | March 28, 2002 |
| <u>/s/ EDWARD DICKINSON</u> Edward Dickinson | Chief Financial Officer and Secretary (Principal Financial and Accounting Officer) | March 28, 2002 |
| <u>/s/ JAMES I. GOLLA</u> James I. Golla | Director | March 28, 2002 |
| <u>/s/ GEORGE HARTMAN</u> George Hartman | Director | March 28, 2002 |
| <u>/s/ ROBERT SHELDON</u> Robert Sheldon | Director | March 28, 2002 |

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of
Altair International, Inc.
Reno, Nevada

We have audited the accompanying consolidated balance sheets of Altair International, Inc. (an exploration stage company) and subsidiaries (collectively referred to as the "Company") as of December 31, 2001 and 2000, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2001, and for the period from April 9, 1973 (date of inception) to December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. The Company's consolidated financial statements for the period from April 9, 1973 (date of inception) to December 31, 1997 were audited by other auditors whose report, dated February 17, 2000, expressed an unqualified opinion on those statements. The financial statements for the period from April 9, 1973 (date of inception) through December 31, 1997 reflect a net loss of \$7,350,462 of the related totals. The other auditors' report has been furnished to us and our opinion, insofar as it related to the amounts included for such prior periods, is based solely on the report of such other auditors.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the report of other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audit and the report of other auditors, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2001 and 2000, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, and for the period from April 9, 1973 (date of inception) to December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The Company is an exploration stage enterprise engaged in developing mineral processing equipment, producing titanium dioxide products, and exploring and developing mineral properties. As discussed in Note 1 to the consolidated financial statements, the Company's operating losses raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties. In addition, because the Company is still in the exploration stage, there have been no adjustments to record potential impairments on long-term assets.

DELOITTE & TOUCHE LLP

Salt Lake City, Utah
March 25, 2002

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2001 AND 2000
(Expressed in United States Dollars)

| ASSETS | <u>2001</u> | <u>2000</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|
| CURRENT ASSETS: | | |
| Cash and cash equivalents | \$ 599,884 | \$ 1,335,729 |
| Restricted cash | | 2,250,000 |
| Other current assets | 33,651 | 390,351 |
| Total current assets | 633,535 | 3,976,080 |
| RESTRICTED CASH | | 1,750,000 |
| PROPERTY AND EQUIPMENT, Net | 5,987,950 | 6,601,917 |
| PATENTS AND RELATED EXPENDITURES, Net | 3,739,864 | 4,111,740 |
| OTHER ASSETS | 491,894 | 212,033 |
| TOTAL ASSETS | <u>\$ 10,853,243</u> | <u>\$ 16,651,770</u> |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Accounts payable and accrued liabilities | \$ 528,405 | \$ 158,642 |
| Notes payable - current portion | | 3,500,004 |
| Loans payable - related parties | 143,000 | |
| Capital lease obligations - current portion | 2,312 | 24,763 |
| Deferred revenue | 40,972 | 57,957 |
| Total current liabilities | 714,689 | 3,741,366 |
| NOTES PAYABLE, Long-term portion | 1,462,060 | 2,687,181 |
| CAPITAL LEASE OBLIGATIONS, Long-term portion | | 2,312 |
| COMMITMENTS AND CONTINGENCIES (Notes 1, 3, 6, 7, 8, 9, 10, 11, and 12) | | |
| SHAREHOLDERS' EQUITY: | | |
| Common stock, no par value, unlimited shares authorized; 22,694,142 and 19,325,488 shares issued and outstanding at December 31, 2001 and 2000 | 38,089,320 | 32,388,589 |
| Stock subscription receivable | | (561,300) |
| Deficit accumulated during the development stage | (29,412,826) | (21,606,378) |
| Total shareholders' equity | 8,676,494 | 10,220,911 |
| TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY | <u>\$ 10,853,243</u> | <u>\$ 16,651,770</u> |

See notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS
FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2001 AND
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Year Ended December 31, | | | Period April 9, 1973 (Date of Inception) to December 31, |
|------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|--------------|-------------------------------------------------------------------|
| | 2001 | 2000 | 1999 | 2001 |
| SALES | \$ 42,816 | None | None | \$ 42,816 |
| COST OF SALES | 18,175 | None | None | 18,175 |
| GROSS MARGIN | 24,641 | None | None | 24,641 |
| OPERATING EXPENSES: | | | | |
| Mineral exploration and development | 930,777 | \$ 1,217,966 | \$ 714,893 | 5,918,665 |
| Research and development | 559,454 | 1,555,472 | 354,462 | 3,128,959 |
| Professional services | 593,088 | 366,275 | 252,337 | 2,563,912 |
| General and administrative expenses | 2,824,646 | 2,271,250 | 1,899,759 | 11,847,482 |
| Depreciation and amortization | 1,138,208 | 1,236,404 | 508,083 | 4,517,414 |
| Total operating expenses | 6,046,173 | 6,647,367 | 3,729,534 | 27,976,432 |
| LOSS FROM OPERATIONS | 6,021,532 | 6,647,367 | 3,729,534 | 27,951,791 |
| OTHER EXPENSE (INCOME): | | | | |
| Interest expense | 1,881,077 | 215,216 | 1,966 | 3,383,951 |
| Interest income | (148,980) | (83,440) | (134,811) | (813,840) |
| Loss (gain) on foreign exchange | 402 | (864,669) | 160,619 | (558,777) |
| Total other expense (income), net | 1,732,499 | (732,893) | 27,774 | 2,011,334 |
| LOSS BEFORE EXTRAORDINARY ITEMS | 7,754,031 | 5,914,474 | 3,757,308 | 29,963,125 |
| EXTRAORDINARY ITEMS: | | | | |
| Gain on forgiveness of debt | | | (67,442) | (795,972) |
| Loss on redemption of convertible debentures | | | | 193,256 |
| Total extraordinary items | | | (67,442) | (602,716) |
| NET LOSS | 7,754,031 | 5,914,474 | 3,689,866 | 29,360,409 |
| PREFERENTIAL WARRANT DIVIDEND | 52,417 | | | 52,417 |
| NET LOSS APPLICABLE TO SHAREHOLDERS | \$ 7,806,448 | \$ 5,914,474 | \$ 3,689,866 | \$ 29,412,826 |
| LOSS BEFORE EXTRAORDINARY ITEMS AND PREFERENTIAL WARRANT DIVIDEND PER COMMON SHARE - Basic and diluted | \$ 0.39 | \$ 0.34 | \$ 0.24 | \$ 4.14 |
| EFFECT OF EXTRAORDINARY ITEMS ON EARNINGS PER SHARE - Basic and diluted | 0.00 | 0.00 | (0.01) | (0.08) |
| LOSS PER COMMON SHARE - Basic and diluted | \$ 0.39 | \$ 0.34 | \$ 0.23 | \$ 4.06 |
| WEIGHTED AVERAGE SHARES - Basic and diluted | 20,063,473 | 17,371,214 | 15,472,075 | 7,231,574 |

See notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Common Stock | | Stock Subscription Receivable | Deficit Accumulated During the Development Stage | Total |
|----------------------------------------------|--------------|------------------|-------------------------------------|--------------------------------------------------------------|-----------|
| | Shares | Stated Amount | | | |
| APRIL 9, 1973 (DATE OF INCEPTION) . | None | None | None | None | None |
| Common stock issued | 101,668 | \$ 387,073 | \$ | \$ | 387,073 |
| Net loss | | | | (361,572) | (361,572) |
| BALANCE, DECEMBER 31, 1984 . . . | 101,668 | 387,073 | | (361,572) | 25,501 |
| Common stock issued | 40,000 | 240,770 | | | 240,770 |
| Common stock issued for management fees | 1,280 | 7,004 | | | 7,004 |
| Net loss | | | | (78,606) | (78,606) |
| BALANCE, DECEMBER 31, 1985 . . . | 142,948 | 634,847 | | (440,178) | 194,669 |
| Common stock issued for property | 3,333 | 18,058 | | | 18,058 |
| Acquisition of subsidiary | 780,000 | 44,551 | | | 44,551 |
| Common stock issued for underwriter bonus | 4,000 | 1 | | | 1 |
| Net loss | | | | (210,667) | (210,667) |
| BALANCE, DECEMBER 31, 1986 . . . | 930,281 | 697,457 | | (650,845) | 46,612 |
| Common stock issued for property | 6,667 | 8,027 | | | 8,027 |
| Flow through shares | 298,650 | 463,301 | | | 463,301 |
| Common stock issued for rights offering . | 257,822 | 253,947 | | | 253,947 |
| Net loss | | | | (696,642) | (696,642) |
| BALANCE, DECEMBER 31, 1987 . . . | 1,493,420 | 1,422,732 | | (1,347,487) | 75,245 |
| Common stock issued for services | 16,667 | 14,592 | | | 14,592 |
| Common stock issued | 16,667 | 14,592 | | | 14,592 |
| Common stock issued in settlement of debt | 233,333 | 51,073 | | | 51,073 |
| Net loss | | | | (149,316) | (149,316) |
| BALANCE, DECEMBER 31, 1988 . . . | 1,760,087 | 1,502,989 | | (1,496,803) | 6,186 |
| Common stock issued | 127,500 | 75,058 | | | 75,058 |
| Common stock issued in settlement of lawsuit | 41,667 | 22,800 | | | 22,800 |
| Net loss | | | | (151,372) | (151,372) |
| BALANCE, DECEMBER 31, 1989 . . . | 1,929,254 | 1,600,847 | | (1,648,175) | (47,328) |

(Continued)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Common Stock | | Stock Subscription Receivable | Deficit Accumulated During the Development Stage | Total |
|----------------------------------------------|--------------|------------------|-------------------------------------|--------------------------------------------------------------|-------------|
| | Shares | Stated Amount | | | |
| BALANCE, DECEMBER 31, 1989 . . . | 1,929,254 | \$ 1,600,847 | \$ | \$ (1,648,175) | \$ (47,328) |
| Common stock issued | 133,333 | 218,882 | | | 218,882 |
| Exercise of stock options | 33,333 | 18,240 | | | 18,240 |
| Common stock issued for property | 11,666 | 11,674 | | | 11,674 |
| Common stock issued for services | 13,333 | 21,888 | | | 21,888 |
| Net loss | | | | (230,125) | (230,125) |
| BALANCE, DECEMBER 31, 1990 . . . | 2,120,919 | 1,871,531 | | (1,878,300) | (6,769) |
| Common stock issued | 266,667 | 196,994 | | | 196,994 |
| Common stock issued for property | 28,333 | 17,146 | | | 17,146 |
| Net loss | | | | (258,209) | (258,209) |
| BALANCE, DECEMBER 31, 1991 . . . | 2,415,919 | 2,085,671 | | (2,136,509) | (50,838) |
| Common stock issued | 1,086,753 | 443,237 | | | 443,237 |
| Common stock issued for property | 115,000 | 49,249 | | | 49,249 |
| Common stock issued for settlement of debt | 55,177 | 24,155 | | | 24,155 |
| Net loss | | | | (353,665) | (353,665) |
| BALANCE, DECEMBER 31, 1992 . . . | 3,672,849 | 2,602,312 | | (2,490,174) | 112,138 |
| Common stock issued | 48,000 | 36,393 | | | 36,393 |
| Common stock issued for property | 46,667 | 55,012 | | | 55,012 |
| Net loss | | | | (193,323) | (193,323) |
| BALANCE, DECEMBER 31, 1993 . . . | 3,767,516 | 2,693,717 | | (2,683,497) | 10,220 |
| Common stock issued | 600,000 | 131,329 | | | 131,329 |
| Common stock issued for shares of subsidiary | 750,000 | 257,187 | | | 257,187 |
| Common stock issued for royalties | 83,333 | 33,641 | | | 33,641 |
| Net loss | | | | (227,860) | (227,860) |
| BALANCE, DECEMBER 31, 1994 . . . | 5,200,849 | 3,115,874 | | (2,911,357) | 204,517 |
| Common stock issued | 2,700,000 | 875,529 | | | 875,529 |
| Exercise of stock options | 247,000 | 53,553 | | | 53,553 |
| Exercise of stock warrants | 350,000 | 171,458 | | | 171,458 |
| Net loss | | | | (424,109) | (424,109) |
| BALANCE, DECEMBER 31, 1995 . . . | 8,497,849 | 4,216,414 | | (3,335,466) | 880,948 |

(Continued)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Common Stock | | Stock Subscription Receivable | Deficit Accumulated During the Development Stage | Total |
|-----------------------------------------------|--------------|------------------|-------------------------------------|--------------------------------------------------------------|-------------|
| | Shares | Stated Amount | | | |
| BALANCE, DECEMBER 31, 1995 . . . | 8,497,849 | \$ 4,216,414 | \$ | \$ (3,335,466) | \$ 880,948 |
| Common stock issued | 554,027 | 1,637,307 | | | 1,637,307 |
| Exercise of stock options | 702,000 | 526,850 | | | 526,850 |
| Exercise of stock warrants | 3,012,463 | 2,471,219 | | | 2,471,219 |
| Stock options issued to non-employees . . | | 285,503 | | | 285,503 |
| Common stock issued for acquisition of TMI | 1,919,957 | 2,521,469 | | | 2,521,469 |
| Net loss | | | | (1,032,903) | (1,032,903) |
| BALANCE, DECEMBER 31, 1996 . . . | 14,686,296 | 11,658,762 | | (4,368,369) | 7,290,393 |
| Exercise of stock options | 362,500 | 1,530,406 | | | 1,530,406 |
| Stock options issued to non-employees . . | | 528,555 | | | 528,555 |
| Stock options issued to employees | | 62,800 | | | 62,800 |
| Exercise of stock warrants | 443,949 | 1,038,788 | | | 1,038,788 |
| Net loss | | | | (2,982,093) | (2,982,093) |
| BALANCE, DECEMBER 31, 1997 . . . | 15,492,745 | 14,819,311 | | (7,350,462) | 7,468,849 |
| Stock options issued to non-employees . . | | 841,944 | | | 841,944 |
| Stock options issued to employees | | 15,420 | | | 15,420 |
| Common stock cancelled | (723,065) | | | | |
| Common stock issued for convertible debenture | 387,735 | 3,061,444 | | | 3,061,444 |
| Exercise of stock options | 17,500 | 113,664 | | | 113,664 |
| Net loss | | | | (4,651,576) | (4,651,576) |
| BALANCE, DECEMBER 31, 1998 . . . | 15,174,915 | 18,851,783 | | (12,002,038) | 6,849,745 |
| Stock options issued to non-employees . . | | 765,386 | | | 765,386 |
| Common stock issued | 300,000 | 1,862,500 | | | 1,862,500 |
| Net loss | | | | (3,689,866) | (3,689,866) |
| BALANCE, DECEMBER 31, 1999 . . . | 15,474,915 | 21,479,669 | | (15,691,904) | 5,787,765 |
| Stock options issued to non-employees . . | | 424,063 | | | 424,063 |
| Stock subscription receivable | | | (561,300) | | (561,300) |
| Stock warrants issued | | 1,245,050 | | | 1,245,050 |
| Exercise of stock options | 71,300 | 335,778 | | | 335,778 |
| Common stock issued | 3,779,273 | 8,904,029 | | | 8,904,029 |
| Net loss | | | | (5,914,474) | (5,914,474) |
| BALANCE, DECEMBER 31, 2000 . . . | 19,325,488 | 32,388,589 | (561,300) | (21,606,378) | 10,220,911 |

See notes to consolidated financial statements.

(Continued)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Common Stock | | Stock Subscription Receivable | Deficit Accumulated During the Development Stage | Total |
|----------------------------------------------|--------------|------------------|-------------------------------------|--------------------------------------------------------------|---------------|
| | Shares | Stated Amount | | | |
| BALANCE, DECEMBER 31, 2000 . . . | 19,325,488 | \$ 32,388,589 | \$ (561,300) | \$ (21,606,378) | \$ 10,220,911 |
| Stock options issued to non-employees . . | | 158,089 | | | 158,089 |
| Stock subscription receivable | | | 561,300 | | 561,300 |
| Stock warrants issued | | 776,469 | | | 776,469 |
| Preferential warrant dividend | | 52,417 | | (52,417) | |
| Shares issued for settlement of debt | 824,800 | 1,220,423 | | | 1,220,423 |
| Exercise of stock options | 65,000 | 130,000 | | | 130,000 |
| Common stock expired | (266,170) | | | | |
| Exercise of warrants | 713,333 | 713,333 | | | 713,333 |
| Common stock issued | 2,031,691 | 2,650,000 | | | 2,650,000 |
| Net loss | | | | (7,754,031) | (7,754,031) |
| BALANCE, DECEMBER 31, 2001 . . . | 22,694,142 | \$ 38,089,320 | None | \$ (29,412,826) | \$ 8,676,494 |

See notes to consolidated financial statements.

(Concluded)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2001 AND
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Year Ended December 31, | | | Period April 9, 1973 (Date of Inception) to December 31, |
|---------------------------------------------------------|-------------------------|----------------|----------------|-------------------------------------------------------------------|
| | 2001 | 2000 | 1999 | 2001 |
| CASH FLOWS FROM DEVELOPMENT ACTIVITIES: | | | | |
| Net loss | \$ (7,754,031) | \$ (5,914,474) | \$ (3,689,866) | \$ (29,360,409) |
| Adjustments to reconcile net loss to net cash used | | | | |
| in development activities: | | | | |
| Depreciation and amortization | 1,138,208 | 1,236,404 | 508,083 | 4,517,414 |
| Shares issued for services | | | | 99,926 |
| Shares issued for settlement of debt | | | | 75,228 |
| Shares issued for interest | 819,755 | | | 823,827 |
| Shares issued for property | | | | 159,166 |
| Issuance of stock options to non-employees | 158,089 | 424,063 | 765,386 | 3,003,540 |
| Issuance of stock options to employees | | | | 78,220 |
| Issuance of stock warrants | 396,123 | 420,182 | | 816,305 |
| Amortization of discount on note payable | 403,021 | 12,052 | | 415,073 |
| Amortization of debt issuance costs | 100,000 | | | 100,000 |
| Loss on redemption of convertible debenture | | | | 193,256 |
| Gain on forgiveness of debt | | | (67,442) | (795,972) |
| Loss on disposal of fixed assets | | | | 1,945 |
| Loss (gain) on foreign currency translation | 402 | (864,669) | 160,619 | (559,179) |
| Deferred financing costs written off | | | | 515,842 |
| Changes in assets and liabilities (net of effects | | | | |
| of acquisition): | | | | |
| Restricted cash | 4,000,000 | (4,000,000) | | |
| Other current assets | 14,016 | 990,579 | 172,512 | 1,700,947 |
| Other assets | 886 | (169,606) | | (168,720) |
| Accounts payable and accrued liabilities | 369,763 | (75,161) | 48,734 | 259,191 |
| Deferred revenue | (16,985) | 57,957 | | 40,972 |
| Net cash used in development activities | (370,753) | (7,882,673) | (2,101,974) | (18,083,428) |
| CASH FLOWS FROM INVESTING ACTIVITIES: | | | | |
| Asset acquisition (see Note 3) | | | (2,422,417) | (2,422,417) |
| Purchase of property and equipment | (158,296) | (226,612) | (207,048) | (1,294,675) |
| Disposal (purchase) of patents and related expenditures | 5,933 | | (76,135) | (1,882,187) |
| Net cash used in investing activities | (152,363) | (226,612) | (2,705,600) | (5,599,279) |

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2001 AND
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

| | Year Ended December 31, | | | Period April 9, 1973 (Date of Inception) to December 31, |
|---------------------------------------------------------------------------|-------------------------|--------------|--------------|-------------------------------------------------------------------|
| | 2001 | 2000 | 1999 | 2001 |
| CASH FLOWS FROM FINANCING ACTIVITIES: | | | | |
| Issuance of common shares for cash, net of issuance costs | \$ 2,650,000 | \$ 8,904,029 | \$ 1,862,500 | \$ 18,173,659 |
| Collection of stock subscription receivable | 561,300 | | | 561,300 |
| Issuance of convertible debenture | | | | 5,000,000 |
| Proceeds from exercise of stock options | 130,000 | 335,778 | | 2,708,491 |
| Proceeds from exercise of warrants | 713,333 | | | 4,617,328 |
| Issuance of related party notes | 168,000 | | | 168,000 |
| Issuance of notes payable | | 7,000,000 | | 7,000,000 |
| Payment of notes payable | (4,385,599) | (6,498,931) | (6,191) | (11,196,044) |
| Payment of related party notes | (25,000) | | | (25,000) |
| Payment on capital lease | (24,763) | | | (24,763) |
| Purchase of call options | | (449,442) | | (449,442) |
| Redemption of convertible debentures | | | | (2,250,938) |
| Net cash (used in) provided by financing activities | (212,729) | 9,291,434 | 1,856,309 | 24,282,591 |
| NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS | | | | |
| | (735,845) | 1,182,149 | (2,951,265) | 599,884 |
| CASH AND CASH EQUIVALENTS, Beginning of period | 1,335,729 | 153,580 | 3,104,845 | None |
| CASH AND CASH EQUIVALENTS, End of period . . | \$ 599,884 | \$ 1,335,729 | \$ 153,580 | \$ 599,884 |

| | Year Ended December 31, | | |
|--------------------------------------|-------------------------|-----------|----------|
| | 2001 | 2000 | 1999 |
| SUPPLEMENTAL DISCLOSURES: | | | |
| Cash paid for interest | \$ 386,557 | \$ 85,929 | \$ 1,966 |
| Cash paid for income taxes | None | None | None |

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2001, 2000, AND 1999,
AND FOR THE PERIOD APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)

SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:

For the year ended December 31, 2001:

- In connection with amendments to the Doral 18, LLC 2000 Note, we issued warrants for 300,000 shares of common stock. The warrants had an estimated fair value of \$346,354 of which \$239,562 has been amortized into interest expense during the year ended December 31, 2001. The remaining amount will be recognized over the life of the note.
- We cancelled call options on 228,456 shares of our common stock to pay \$97,743 of principal and \$244,941 of interest on the Doral 18, LLC 2000 Note. In addition, the cancellation of the call options resulted in an additional interest expense of \$210,568.
- In accordance with the terms of our Doral 18, LLC 2000 Note, we paid \$644,804 of principal and \$273,731 of interest through the issuance of 824,800 shares of our common stock. In addition, the conversion of the note resulted in an additional interest expense of \$301,888.
- We repriced warrants, held by a shareholder, for 713,333 common shares. The repriced warrants have an incremental fair value of \$52,417 and have been accounted for as a preferential warrant dividend.
- In connection with the 2001 Note issued to Doral 18, LLC, we issued warrants for 200,000 common shares. The warrants had an estimated fair value of \$74,733. We also repriced existing warrants for 650,000 common shares from \$3.00 per share to \$1.50 per share. The repriced warrants have an incremental fair value of \$199,222.

For the year ended December 31, 2000:

- We entered into a capital lease obligation of \$46,395 for laboratory equipment.
- We issued 1,003,626 shares of common stock as part of a repricing agreement (see Note 8).
- We recorded a stock subscription receivable for 165,000 shares of common stock with an investor.
- In conjunction with the Doral 18, LLC note (see Note 6), we issued warrants to purchase 350,000 common shares at \$3.00 per share. The warrants had an estimated fair value of \$824,900.
- We cancelled call options on 19,222 shares of our common stock to pay \$18,221 of interest on the 2000 Note.

For the year ended December 31, 1999:

- On November 16, 1999, we acquired certain assets from BHP Minerals International, Inc. Liabilities assumed in the acquisition are as follows:

| | |
|------------------------------------------------------------------------------------|---------------------|
| Fair value of assets purchased | \$ 9,625,500 |
| Cash paid | None |
| Note payable denominated in U.S. dollars (15,000,000 Australian dollars) | <u>\$ 9,625,500</u> |

See notes to consolidated financial statements.

(Concluded)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2001, 2000, AND 1999,
AND FOR THE PERIOD APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2001
(Expressed in United States Dollars)**

1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business - Altair International Inc. is incorporated in the province of Ontario, Canada and is engaged in the business of (1) producing titanium dioxide products, (2) exploring and developing mineral properties in the United States, and (3) developing mineral processing equipment for use in the recovery of fine and heavy mineral particles, including titanium, zircon, gold and environmental contaminants. Our authorized capital stock is comprised of an unlimited number of common shares with no par value.

Prior to fiscal year 1998, we prepared our financial statements in accordance with accounting principles generally accepted in Canada. Due to substantially all of our operations being located in the United States, we have elected to present our financial statements in accordance with accounting principles generally accepted in the United States of America.

Principles of Consolidation - The consolidated financial statements include the accounts of Altair International Inc. and its subsidiaries which include (1) Mineral Recovery Systems, Inc. (MRS), (2) Fine Gold Recovery Systems, Inc. (FGRS), (3) Altair Nanomaterials, Inc. (ANI), and (4) Tennessee Valley Titanium, Inc. (TVT), (collectively referred to as the "Company"), all of which are 100% owned. Intercompany transactions and balances have been eliminated in consolidation.

Basis of Presentation - The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the consolidated financial statements for the years ended December 31, 2001, 2000, and 1999, we incurred net losses of \$7,754,031, \$5,914,474, and \$3,689,866, respectively, and since the date of inception have incurred cumulative losses of \$29,360,409. At December 31, 2001 and 2000, we had stockholder's equity of \$8,676,494 and \$10,220,911, respectively. At December 31, 2001, current liabilities exceeded current assets by \$81,154. However, at December 31, 2000, current assets exceeded current liabilities by \$234,714. These factors among others may raise substantial doubt about the Company's ability to continue as a going concern.

The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern. Because the Company is still in the exploration stage, there have been no adjustments to record potential impairment on long-term assets. Our continuation as a going concern is dependent upon our ability to generate sufficient cash flow to meet our obligations on a timely basis, to obtain additional financing or refinancing as may be required, to develop commercially viable products and processes, and ultimately to establish successful operations. We are in the process of developing the titanium processing technology, the Tennessee mineral property, and the centrifugal jig. We have financed operations primarily through the issuance of equity securities (common stock, convertible debentures, stock options and warrants), and by the issuance of debt (term notes). Additional funds will be required to complete development activities. We believe that current working capital, cash receipts from anticipated sales, and funding through sales of common stock will be sufficient to enable us to continue as a going concern.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates - The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires that we make estimates and assumptions

that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents - Cash and cash equivalents are highly liquid investments with an original maturity of three months or less. Cash equivalents are recorded at cost, which approximates fair value.

Property and Equipment - Property and equipment are stated at cost less accumulated depreciation. Depreciation is recorded using the straight-line method over the following useful lives:

| | |
|--------------------------------|--------------|
| Furniture and office equipment | 3 - 7 years |
| Vehicles | 5 years |
| Centrifugal jig equipment | 7 years |
| Jig testing equipment | 7 years |
| Pigment production equipment | 5 - 10 years |

Patents and Related Expenditures - Patents related to the pigment production technology and centrifugal jig technology are carried at cost and amortized on a straight-line basis over their estimated useful lives, which range from 14 to 20 years.

Exploration - Expenditures incurred in the search for mineral deposits and the determination of the commercial viability of such deposits are charged to expense as incurred.

Research and Development Expenditures - Research and development expenditures are charged to expense as incurred.

Debt Issuance Costs - Debt issuance costs are recorded at cost and amortized over the life of the note payable, which ranged from 15 to 24 months. Debt issuance costs totaled \$475,694 and \$195,833 at December 31, 2001 and 2000, respectively.

Foreign Currency Translation - Asset and liability accounts, which are originally recorded in the appropriate local currencies, are translated into U.S. dollars at year-end exchange rates. Revenue and expense accounts are translated at the average exchange rates for the period. Transaction gains and losses are included in the accompanying consolidated statements of operations. Substantially all of our assets are located in the United States of America.

Stock-Based Compensation - We have elected to follow the accounting provisions of Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, and to furnish the pro forma disclosures required under Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation*.

Long-Lived Assets - We evaluate the carrying value of long-term assets, including intangibles, when events or circumstance indicate the existence of a possible impairment, based on projected undiscounted cash flows, and recognize impairment when such cash flows will be less than the carrying values. Measurement of the amounts of impairments, if any, is based upon the difference between carrying value and fair value. Events or circumstances that could indicate the existence of a possible impairment include obsolescence of the technology, an absence of market demand for the product, and/or continuing technology rights protection.

Revenue Recognition - Revenue is recognized at the time the purchaser has accepted delivery of the product. For the year ended December 31, 2001, we sold titanium dioxide and lithium titanate nanoparticles, and other materials, to customers involved in research activities totaling \$42,816. To date, none of our sales have been utilized by customers in commercial products held for sale.

Net Loss Per Common Share - Basic net loss per common share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period. The existence of stock options,

warrants, and convertible debentures does not affect the calculation of net loss per share on a fully diluted basis because the effect of including the additional common stock equivalents would be antidilutive.

Recent Accounting Pronouncements - SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended, requires that all derivative instruments, including certain derivative instruments embedded in other contracts and hedging activities, be recognized as either assets or liabilities at fair market value. We adopted the standard on January 1, 2001. There has been no impact on our financial statements of adopting this statement.

SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities - A Replacement of FASB Statement No. 125*, requires disclosures related to securitization transactions and collateral. We adopted this statement at January 1, 2001. There has been no impact on our financial statements of adopting this statement.

In June 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 141, *Business Combinations*. SFAS No. 141 establishes accounting and reporting standards for business combinations and is effective for business combinations initiated after June 30, 2001. We adopted this statement at July 1, 2001. There has been no impact on our financial statements of adopting this statement.

In June 2001, the FASB also issued SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 142 establishes accounting and reporting standards for goodwill and intangible assets, requiring annual impairment testing for goodwill and intangible assets, and the elimination of periodic amortization of goodwill and certain intangibles. We will adopt the provisions of SFAS No. 142 in 2002. Net intangible assets as of December 31, 2001 are \$3,739,864. We have not yet completed an analysis of the impact of the adoption of the statement. The impairment analysis will be completed by June 30, 2002 as required by SFAS No. 142.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*, which requires asset retirement obligations to be recognized when they are incurred and displayed as liabilities. SFAS No. 143 is effective for the year ending December 31, 2003. Management is currently evaluating the impact of this pronouncement on the consolidated financial statements.

In August 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. SFAS No. 144 addresses accounting and reporting for the impairment or disposal of long-lived assets, including the disposal of a segment of business. SFAS No. 144 is effective for the year ending December 31, 2002. Management is currently evaluating the impact of this pronouncement on the consolidated financial statements.

Comprehensive Income - The only component of comprehensive income in 2001, 2000, and 1999 was net loss.

Deferred Income Taxes - We use the asset and liability approach for financial accounting and reporting for income taxes. Deferred income taxes are provided for temporary differences in the bases of assets and liabilities as reported for financial statement purposes and income tax purposes. We have recorded a valuation allowance against all deferred tax assets.

Extraordinary Items - As a result of a 1994 merger with TransMar, Inc. (TMI), FGRS assumed all of TMI's liabilities. During 1999, 1998, and 1996, FGRS extinguished certain of TMI's liabilities at less than the recorded amounts of such debt. The gain on forgiveness of debt totaled \$67,442, \$25,805, and \$702,725 in 1999, 1998, and 1996, respectively.

During 1998, we redeemed convertible debentures of \$2,250,000, incurring a redemption loss of \$193,256.

Deferred Revenue - We entered into a sales contract on October 6, 2000 with a customer for titanium dioxide nanoparticles under which the total contract amount was prepaid. During 2001, \$16,476 of products was delivered under the contract and recognized as sales revenues.

Fair Value of Financial Instruments - Our financial instruments, when valued using market interest rates, would not be materially different from the amounts presented in the consolidated financial statements.

Reclassifications - Certain reclassifications have been made to the prior year amounts to conform to classifications adopted in the current year.

3. ACQUISITION OF CERTAIN ASSETS

On November 16, 1999, we entered into an Asset Purchase and Sale Agreement with BHP Minerals International Inc. (BHP), an Australian company, pursuant to which we purchased all tangible equipment and other assets related to a hydrometallurgical process developed by BHP primarily for the production of titanium dioxide products from titanium bearing ores or concentrates (the "Technology"), in process patent applications and the use of the services of certain BHP personnel involved in the development of the Technology for a period of one year.

The purchase price for the assets and technology was 15,000,000 Australian dollars (AUD\$), or \$9,625,500 U.S. dollars (US\$), and was payable in four equal installments. The first installment was paid at closing on November 16, 1999, the second and third installments were paid on May 12, 2000 and the remaining installment was paid on August 1, 2000. The installments due in AUD\$ were translated into US\$ at the date of payment and the related foreign currency gain (loss) was recorded as other income or expense. We are also required to pay to BHP, until the earlier of (1) November 15, 2014 or (2) the date we have paid an aggregate royalty of 105,000,000 AUD\$, a quarterly royalty of from 1.5% to 3% of certain titanium dioxide products produced and 3% of other products sold. As of December 31, 2001, \$922 of royalties were payable under this agreement.

In connection with the Asset Purchase Agreement, we entered into a lease with BHP pursuant to which we lease approximately 20,000 square feet of laboratory and testing space at BHP's testing facility in Reno, Nevada for a monthly rent of \$16,153. The lease is subject to automatic renewal for six-month periods at inflation-adjusted rent until terminated by us. The lease grants us a right of first refusal in the event BHP intends to sell the building and property subject to the lease.

The acquisition was accounted for as a purchase. The assets (consisting of property and equipment, service agreement, and technology) have been recorded at their estimated fair values at the date of acquisition. The amount of the purchase price allocated to property and equipment was \$6,568,839, service agreement was \$1,538,985, and technology was \$1,517,736. The technology is being amortized using the straight-line method over seventeen years, which approximates the remaining life of the patents pending. Subsequent to the acquisition, we applied for four United States patents related to the technology acquired from BHP.

4. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following as of December 31, 2001 and December 31, 2000:

| | 2001 | 2000 |
|------------------------------------------|---------------------|---------------------|
| Furniture and office equipment | \$ 75,833 | \$ 82,582 |
| Vehicles | 125,031 | 125,031 |
| Centrifugal jig equipment | 649,065 | 644,632 |
| Jig testing equipment | 45,128 | 45,128 |
| Pigment production equipment | 6,974,548 | 6,822,679 |
| Total | 7,869,605 | 7,720,052 |
| Less accumulated depreciation | (1,881,655) | (1,118,135) |
| Total property and equipment | <u>\$ 5,987,950</u> | <u>\$ 6,601,917</u> |

Depreciation expense for the years ended December 31, 2001, 2000, and 1999 totaled \$772,268, \$751,846, and \$169,234, respectively.

5. PATENTS AND RELATED EXPENDITURES

Patents and related expenditures consisted of the following at December 31, 2001 and December 31, 2000:

| | 2001 | 2000 |
|--------------------------------------------------|--------------|--------------|
| Pigment production patent applications | \$ 1,517,736 | \$ 1,523,670 |
| Centrifugal jig patents | 4,210,987 | 4,210,987 |
| Royalty agreement | 424,881 | 424,881 |
| Mineral recovery technology rights | 243,000 | 243,000 |
| | 6,396,604 | 6,402,538 |
| Less accumulated amortization | (2,656,740) | (2,290,798) |
| Total patents and related expenditures | \$ 3,739,864 | \$ 4,111,740 |

6. NOTES PAYABLE AND CAPITAL LEASE OBLIGATIONS

Notes payable consisted of the following at December 31, 2001 and 2000:

| | 2001 | 2000 |
|----------------------------------------------------------------------------------|--------------|--------------|
| Note payable to Doral 18, LLC | \$ 1,867,857 | \$ 7,000,000 |
| Less current portion | | (3,500,004) |
| Less discount resulting from allocation of debt proceeds to warrant | (405,797) | (812,815) |
| Long-term portion of notes payable | \$ 1,462,060 | \$ 2,687,181 |

On December 15, 2000, pursuant to a securities purchase agreement, we sold to Doral 18, LLC ("Doral") a \$7 million 10% Asset-Backed Exchangeable Term Note (the 2000 Note) and detachable warrants to purchase 350,000 common shares at \$3.00 per share. At the same time, we acquired call options on 247,678 shares of our common stock held by Doral 18, LLC.

Net proceeds of \$4 million from the 2000 Note were placed in a restricted bank account to secure a letter of credit and were scheduled to be released as principal payments were made. Under the 2000 Note, we were required to make monthly payments on or before the 15th day of each calendar month in the principal amount of \$291,667 plus accrued interest. We had the right to redeem the monthly payment amounts in cash at any time throughout the term of the 2000 Note and could prepay the 2000 Note in \$250,000 increments at any time at a price equal to 115% of the sum of outstanding principal and accrued interest. If we elected not to redeem the monthly payment amount in cash, on each due date, the holder of the 2000 Note automatically received the right to exchange (immediately or at any later date during the term) the monthly payment amount into common shares at the applicable exchange price. The exchange price for any date was the lesser of (a) a fixed exchange price of \$3.00, subject to adjustment, and (b) the average of the lowest three daily trading prices of the common shares during the 15 trading days ending on the day before an exchange right was exercised. At its option, the holder of the 2000 Note could reduce at fair market value the number of shares subject to the call option described in Note 8 in lieu of receiving shares upon the exercise of exchange rights. The 2000 Note was due and payable in full on December 15, 2003.

During 2000, we paid \$18,221 of interest through the cancellation of call options on 19,222 shares of our common stock.

During 2001, we made cash principal payments of \$1,894,394, interest payments of \$286,557, and incurred additional interest expense of \$100,000 related to fees to extend the registration statement associated with the 2000 Note. In addition, we paid \$97,743 of principal and \$244,941 of interest on the 2000 Note through

the cancellation of call options on 228,456 shares of our common stock. Doral also converted \$644,804 of principal and \$273,731 of interest payable on the 2000 Note into 824,800 shares of common stock. These conversions resulted in additional interest expense of \$301,888 which is equal to the difference between the fair value of the stock at the date of conversion and the conversion price stated on the note agreement.

On June 7, 2001, we entered into an agreement with Doral under which we were granted the option to redeem up to \$1,652,252 of the unpaid monthly payment amounts with the addition of a 10% redemption premium. In addition, Doral agreed to waive the penalties associated with late effectiveness of the registration statement and gave us the option to redeem the unexercised portion of exchange rights that are not exercised within 90 days of becoming exercisable. In return for this, we granted Doral warrants to purchase 300,000 common shares at an exercise price of \$3.00. The warrants expire on the earlier of December 15, 2005 or the date 60 days following the fifth day the closing price of our common shares equals or exceeds \$12.00. The warrants have a fair value of \$346,354 of which \$239,562 has been amortized into interest expense during the year ended December 31, 2001. The remaining amount will be recognized over the life of the note.

On December 28, 2001, a Termination and Issuance Agreement was signed with Doral. The 2000 Note was exchanged for a new note ("2001 Note") having a face amount of \$2,000,000. In addition, the letter of credit discussed above was terminated and \$2,500,733 of restricted cash securing the letter of credit was paid to Doral. The 2001 Note has an interest rate of 11% per annum (see below). Interest is due and payable monthly. If interest is not paid, Doral automatically receives the right to exchange (immediately or at any later date during the term) the monthly interest payment amount into common stock at the applicable exchange price. The exchange price for any date is equal to 75% of the average of the closing price of our common stock for the five trading days ending on the trading day immediately preceding the respective due date for payment of interest. The principal amount of the 2001 Note is due and payable on March 31, 2003.

In connection with the 2001 Note, 200,000 warrants were issued to Doral to purchase common stock at an exercise price of \$1.50. The warrants are exercisable at any time on or before the earlier of (a) December 15, 2006, or (b) the date 60 days after the market price of the common stock has been equal to or greater than \$12.00 for five consecutive days. The warrants have an estimated fair value of \$74,733, as determined using the Black-Scholes pricing model.

In addition, the exercise price of 650,000 warrants previously issued to Doral in conjunction with the 2000 Note were repriced from \$3.00 per share to \$1.50 per share. The repriced warrants have an incremental fair value of \$199,222, as determined using the Black-Scholes pricing model.

Doral also received contingent warrants to purchase up to 500,000 shares of common stock. The warrants expire on the later of March 31, 2003 or the date the 2001 Note has been paid in full. The warrants are subject to a vesting schedule under which 25,000 shares of common stock vest when the closing price of our common stock exceeds \$2.00 per share for a period of ten consecutive trading days. Thereafter, additional shares of common stock vest in increments of 25,000 on the day following the first time the closing price exceeds a number greater than \$2.00 that is evenly divisible by .5 (e.g. \$2.50, \$3.00, \$3.50) for ten consecutive trading days. The warrant exercise price is \$.01 per common share. The fair value of these warrants will be recognized if and/or when such contingencies are resolved and the warrants vest.

In accordance with EITF 96-19, *Debtor's Accounting for a Modification or Exchange of Debt Instruments*, the exchange of the notes discussed above was not considered to result in a substantially different debt instrument. Accordingly, although the note has a face amount of \$2,000,000, the carrying amount of the note on the date of modification remains at \$1,867,857 and the difference between this amount and the face amount of \$2,000,000 will be recorded as additional interest expense over the life of the note. The new warrants issued and the repricing of the existing warrants were recorded at a fair value of \$273,955 and represent additional debt modification costs. Such costs are being amortized using the interest method over the new term of the debt.

The proceeds of the 2000 Note were allocated between the debt and the warrants based on relative fair values on the date of issuance. Because the 2001 Note was not substantially different from the 2000 Note, the remaining unamortized discount on the note payable is being accreted to interest expense over the term of the 2001 Note.

Under the terms of the 2001 Note, we are required to maintain a minimum cash and cash equivalents balance of \$250,000 at the end of each calendar quarter and at any time the closing price of our common stock has been below \$1.00 per share for three or more trading days. As of December 31, 2001, we complied with these requirements.

The 2001 Note is secured by a pledge of the equipment, intellectual property and common stock of ANI, and by a pledge of the leasehold interest in mineral deposits and common stock of MRS.

We have long-term capital leases related to the acquisition of equipment. Long-term capital lease obligations as of December 31, 2001 are as follows:

| | |
|------------------------------------|-------------|
| Year ending December 31, 2002 | \$ 2,353 |
| Less amounts representing interest | (41) |
| Less current portion | (2,312) |
| Total | <u>None</u> |

The gross book value of equipment under capital leases was \$46,395 at December 31, 2001 and 2000. The amortization expense associated with these capital leases is included in depreciation expense.

7. STOCK OPTIONS AND WARRANTS

Stock Options - We have stock option plans administered by the Board of Directors that provide for the granting of options to employees, officers, directors and other service providers of the Company. Options granted under the plans generally are granted with an exercise price equal to the market value of a common share at the date of grant, have five-year terms and typically vest over periods ranging from immediately to three years from the date of grant.

Stock option activity for the years ended December 31, 2001, 2000 and 1999 is summarized as follows:

| | 2001 | | 2000 | | 1999 | |
|---------------------------------------------------------------|------------------|------------------------------------------|------------------|------------------------------------------|------------------|------------------------------------------|
| | Shares | Weighted Average Exercise Price | Shares | Weighted Average Exercise Price | Shares | Weighted Average Exercise Price |
| Outstanding at beginning of year | 2,958,700 | \$ 5.37 | 3,060,000 | \$ 5.92 | 1,965,000 | \$ 6.61 |
| Granted during the year | 1,368,000 | 2.12 | 420,000 | 3.86 | 1,550,000 | 5.74 |
| Cancelled | (595,000) | 4.14 | (450,000) | 7.80 | (455,000) | 8.30 |
| Exercised | (65,000) | 2.00 | (71,300) | 4.71 | | |
| Outstanding at end of year | <u>3,666,700</u> | <u>\$ 4.38</u> | <u>2,958,700</u> | <u>\$ 5.37</u> | <u>3,060,000</u> | <u>\$ 5.92</u> |
| Options exercisable at year end | <u>2,999,700</u> | <u>\$ 4.84</u> | <u>2,153,700</u> | <u>\$ 5.45</u> | <u>1,835,000</u> | <u>\$ 5.64</u> |
| Weighted average fair value of options granted during year | | <u>\$ 1.70</u> | | <u>\$ 3.24</u> | | <u>\$ 2.83</u> |

The following table summarizes information about stock options outstanding at December 31, 2001:

| Range of Exercise Prices | Stock Options Outstanding | | | Stock Options Exercisable | |
|------------------------------|---------------------------|--------------------------------------------------------------|------------------------------------------|---------------------------|------------------------------------------|
| | Number Outstanding | Weighted Average Remaining Contractual Life (Years) | Weighted Average Exercise Price | Number Exercisable | Weighted Average Exercise Price |
| \$2.00 to \$ 2.10 | 973,000 | 4.0 | \$ 2.00 | 411,000 | \$ 2.00 |
| \$2.25 to \$ 4.00 | 825,000 | 2.9 | 2.62 | 795,000 | 2.61 |
| \$4.38 to \$ 6.75 | 1,008,700 | 2.3 | 5.09 | 933,700 | 5.14 |
| \$6.79 to \$ 10.00 | 860,000 | 1.6 | 7.93 | 860,000 | 7.93 |
| | 3,666,700 | 2.7 | \$ 4.38 | 2,999,700 | \$ 4.84 |

We have elected to follow the measurement provisions of APB Opinion No. 25, under which no recognition of expense is required in accounting for stock options granted to employees for which the exercise price equals or exceeds the fair market value of the stock at the grant date. Generally, stock options are granted at an option price at or greater than fair market value on the date of grant. We recorded compensation expense of \$158,089, \$424,063, and \$765,386 for stock options granted to non-employees for the years ended December 31, 2001, 2000, and 1999, respectively.

We have adopted the disclosure-only provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*. To estimate compensation expense that would be recognized under SFAS 123, we have used the modified Black-Scholes option pricing model. If we had accounted for our stock options using the accounting method prescribed by SFAS 123, our net loss and loss per share would be as follows:

| | 2001 | 2000 | 1999 |
|-------------------------------------------------|--------------|--------------|--------------|
| Net loss (both basic and diluted): | | | |
| As reported | \$ 7,754,031 | \$ 5,914,474 | \$ 3,689,866 |
| Pro forma | 9,228,721 | 9,637,609 | 4,628,960 |
| Loss per common share (both basic and diluted): | | | |
| As reported | 0.39 | 0.34 | 0.23 |
| Pro forma | 0.46 | 0.56 | 0.30 |

In calculating pro forma compensation, the fair value of each stock option is estimated on the date of grant using the Black-Scholes option-pricing model and the following weighted average assumptions:

| | 2001 | 2000 | 1999 |
|-----------------------------------|--------|--------|--------|
| Dividend yield | None | None | None |
| Expected volatility | 81 % | 93 % | 75 % |
| Risk-free interest rate | 4.76 % | 6.40 % | 5.80 % |
| Expected life (years) | 5.0 | 4.6 | 5.0 |

Warrants - Warrant activity for the years ended December 31, 2001, 2000, and 1999 is summarized as follows:

| | 2001 | | 2000 | | 1999 | |
|--------------------------------------|-----------|------------------------------------------|-----------|------------------------------------------|-----------|------------------------------------------|
| | Warrants | Weighted Average Exercise Price | Warrants | Weighted Average Exercise Price | Warrants | Weighted Average Exercise Price |
| Outstanding at beginning | | | | | | |
| of year | 1,883,672 | \$ 5.175 | 150,000 | \$ 8.50 | 180,000 | \$ 16.72 |
| Granted during the year | 3,441,668 | 1.24 | 1,733,672 | 4.89 | 150,000 | 8.50 |
| Expired | | | | | (180,000) | 16.72 |
| Exercised | (713,333) | 1.00 | | | | |
| Outstanding at end of year | 4,612,007 | \$ 2.92 | 1,883,672 | \$ 5.175 | 150,000 | \$ 8.50 |

The warrants were issued in conjunction with debt offerings, issuance of common stock, and payment for outside services. The warrants expire on various dates ranging from March 2002 to July 2006. Most warrants contain provisions whereby the expiration date is accelerated if our Common Shares close at or above specified prices ranging from \$2.50 to \$14.00 per share.

8. OTHER TRANSACTIONS

On March 31, 2000, we entered into a common stock purchase agreement with a private equity fund pursuant to which the equity fund purchased 1,251,303 Common Shares of Altair for an aggregate purchase price of \$6,000,000; however, the number of shares received by the equity fund in exchange for \$6,000,000 was subject to repricing adjustments if the lowest average closing price for any ten days during each of four 30-day repricing periods did not meet a certain threshold. Prior to December 15, 2000, the equity fund repriced 750,782 of the initial shares it purchased under the common stock purchase agreement and received an additional 1,003,626 Common Shares.

Pursuant to an assignment and agreement dated December 15, 2000, the equity fund referred to in the preceding paragraph transferred all of its remaining rights under the common stock purchase agreement, including its right to reprice the remaining 500,521 of the initial 1,251,303 shares, to Doral 18, LLC (Doral) (see Note 6). Pursuant to this purchase agreement, Doral exercised its right to reprice approximately 70,928 of the initial shares and received 247,678 Common Shares. In exchange for approximately \$1,650,000, we bought from Doral and terminated all remaining rights under the common stock purchase agreement, including all remaining repricing rights. In conjunction with this buyout, Doral granted us a call option to purchase 247,678 Common Shares for a nominal exercise price. Between December 15, 2000 and December 28, 2001, we paid \$97,743 of principal and \$244,941 of interest on the \$7 million 10% Asset-Backed Exchangeable Term Note through the cancellation of call options on the 247,678 Common Shares (see Note 6).

In 2001, we received payment of \$561,300 from an investor on a stock subscription receivable.

On March 26, 2001, 266,170 shares of common stock held in escrow as part of the 1999 TransMar, Inc. merger agreement were cancelled because the assets acquired from TransMar, Inc. did not generate the cash flow required by the escrow agreement.

On October 18, 2001, we reduced the exercise price of 255,000 outstanding warrants to \$1.00 per share for a period of 45 days and we reduced the exercise price of 458,333 outstanding warrants to \$1.00 per share through December 14, 2001. As a result of these repricings, we recorded a preferential warrant dividend of \$52,417 as of the repricing date. The warrants had been previously issued with exercise prices ranging from \$4.00 to \$8.00.

9. LEASES

Operating Leases - We lease certain premises and equipment under operating leases. As of December 31, 2001, future minimum lease payments under non-cancelable operating leases were \$5,415 due in 2002.

Lease expense for the years ended December 31, 2001, 2000, and 1999 totaled \$304,330, \$283,964, and \$104,622, respectively.

Mineral Leases - Our subsidiary, MRS, has entered into various mineral leases for a 100% interest in approximately 9,700 acres of land in the state of Tennessee, United States with minimum annual advance royalty payments as follows:

Year ending December 31:

| | |
|------------|------------|
| 2002 | \$ 139,761 |
| 2003 | 157,537 |
| 2004 | 248,411 |
| 2005 | 254,807 |
| 2006 | 254,807 |
| Thereafter | 355,405 |

The mineral leases are subject to a production royalty; however, MRS will receive a credit against production royalties for all advance royalties paid. The lessors can only terminate the leases upon failure of MRS to make the minimum payments as required by the leases. The Company has paid royalties of \$87,593, \$101,559, and \$55,440 for the years ended December 31, 2001, 2000, and 1999, respectively. As of December 31, 2001, we owed \$8,868 of royalty payments to lessors.

10. INCOME TAXES

Because of the net operating losses and a valuation allowance on deferred tax assets, there was no provision for income taxes recorded in the accompanying consolidated financial statements for the three years in the period ended December 31, 2001.

A reconciliation of the federal statutory income tax rate and our effective income tax rates is as follows:

| | Year Ended December 31, | | |
|------------------------------------------|-------------------------|----------------|----------------|
| | 2001 | 2000 | 1999 |
| Federal statutory income taxes (benefit) | \$ (2,713,911) | \$ (2,010,921) | \$ (1,254,554) |
| Meals and entertainment | 601 | 1,824 | 2,349 |
| Valuation allowance | 2,713,310 | 2,009,097 | 1,252,205 |
| Total | None | None | None |

The components of the deferred tax assets consisted of the following as of December 31, 2001 and 2000:

| | 2001 | 2000 |
|-----------------------------------------------------------------|--------------|--------------|
| Deferred tax assets: | | |
| Net operating loss carryforward | \$ 6,238,645 | \$ 3,349,475 |
| Unrealized loss | 80,359 | 24,312 |
| Total deferred tax assets | 6,319,004 | 3,373,787 |
| Deferred tax liabilities - basis difference in assets | (879,780) | (725,740) |
| Valuation allowance | (5,439,224) | (2,648,047) |
| Total deferred tax assets | None | None |

The net operating loss carryforwards total \$17,824,699 as of December 31, 2001 will expire at various dates beginning in 2001 through 2020.

11. COMMITMENTS AND CONTINGENCIES

Employment Agreement - Under the current employment agreement between Altair and our president, Dr. William P. Long, Dr. Long is entitled to receive 200,000 Common Shares in the event (i) voting control of over 35% of the issued stock is acquired in a merger, takeover or similar transaction (a "change of control") and Dr. Long's employment agreement is terminated within 180 days before or at any time after such change of control, or (ii) absent a change of control, if Dr. Long's employment agreement is terminated for any reason except by Dr. Long, by mutual consent, by Altair for cause, or at the end of the term.

Litigation - We are currently not aware of any investigations, claims, or lawsuits which we believe could have a material adverse effect on our consolidated financial position or on our consolidated results of operations.

12. RELATED PARTY TRANSACTIONS

During the year ended December 31, 2001, officers made loans to us of \$168,000. These are short-term, unsecured, non-interest bearing loans payable on demand, the proceeds of which were used to meet working capital needs. A total of \$25,000 was repaid during 2001.

13. SUBSEQUENT EVENT

On March 11, 2002, we entered into a stock subscription agreement with a private investor which provides for the sale of 666,667 common shares and 1,000,002 warrants to purchase common shares at exercise prices between \$2.00 and \$3.00 per share for \$1,000,000 on or before May 31, 2002.

Exhibit 23

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statement Nos. 333-76820, 333-54092, 333-36462 and 333-45511 of Altair International Inc. on Form S-3 and Registration Statement Nos. 333-64495 and 333-33481 of Altair International Inc. on Form S-8 of our report dated March 30, 2001 appearing in this Amendment No. 4 to the Annual Report on Form 10-K/A of Altair International Inc. for the year ended December 31, 2000.

/s/ DELOITTE & TOUCHE LLP

Salt Lake City, Utah

March 27, 2002

Board of Directors

William P. Long
President,
Altair International Inc.

Robert F. Sheldon
Retired President,
Newmont Exploration of Canada, Ltd.

George E. Hartman
President,
Hartman & Company, Inc.

James I. Golla
Retired Journalist, The Globe & Mail
and Director, Apogee Minerals, Ltd.

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